



Framing Global Crisis

How the German news outlets *Süddeutsche Zeitung* and *Die Welt* frame the coronacrisis of 2020 over time

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Abstract

Objectives: The coronacrisis of 2020 is a crisis which's development heavily relies on citizen behaviour. As citizens often turn to news media to inform themselves about such a crisis, the way news media report about the coronacrisis could again heavily influence citizen behaviour. The objectives of this research were therefore to uncover how the German newspapers *Süddeutsche Zeitung* und *Die Welt* frame the coronacrisis over time and how they differ from each other regarding the reporting.

Method: In order to achieve the objectives a mixture between a qualitative and a quantitative comparative content analysis using 180 articles, ninety articles per newspaper over the time frame of the first of January 2020 until the first of April 2020, was conducted. With the objective to learn more about the development of the framing over time in mind, three sub-periods were distinguished and compared to each other. Therefore, the comparative aspect of this content analysis was twofold. One, the articles of the two newspapers were compared to each other in order to uncover where the differences in the framing by the two newspapers were and two, in that, the sub-periods were compared to each other in order to highlight how the framing has developed over time.

Results: Both of the newspapers' framing changed quite drastically over time. In both outlets, during the beginning, the situation was framed as something that is far away from Germany and is likely not have too many impacts and is not very dangerous. This quickly developed to a more negative view, with the news outlets focusing on how bad the situation is everywhere including many predictions stating that it can only get worse. The framing of the coronacrisis by the two news outlets differed in three main regards; firstly, *Süddeutsche Zeitung* generally had a more pessimistic perspective on the situation earlier than *Die Welt* and also recognized some larger scale impacts earlier. Second, the focal points of the newspapers differed; while *Die Welt* had a stronger focus on making predictions and criticising several parties, *Süddeutsche Zeitung* focused more on reporting about protection measures. Lastly, one more difference was how the two newspapers used language; while *Die Welt* used dramatic and loaded terms quite frequently, *Süddeutsche Zeitung* overall seemed to use less suggestive language.

Conclusion: In conclusion, it was found that the framing of the coronavirus developed from being taken rather lightly during the beginning of the situation to something that poses a major threat to society worldwide. While there were some smaller differences between how *Die Welt* and *Süddeutsche Zeitung* framed the crisis, the political orientation of the two newspapers did not seem to have a large impact on how the crisis was framed.

Implications: This research adds to the theory regarding the framing of public health crises. Regarding theoretical implications, it can be said that some patterns that were used in the framing of other public health crises were also found in this study. However the overall development of the framing seemed to be the opposite of how previous health crises were framed. Concerning practical implications, two things became clear while conducting this research. First, citizens should make use of several news sources instead of just one in order to assure that they receive diverse information to understand the full picture of a situation. Secondly, journalists should recognize the impact that the way they report about a situation has and try to consider their own responsibility while reporting on i.e. future health crises.

Keywords: Covid-19, News Frames, Coronacrisis, *Süddeutsche Zeitung*, *Die Welt*

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1. Introduction

The world is currently at a standstill. Public life has temporarily been put on hold by governments all over the world; shops, restaurants, schools and universities are closed, public events are cancelled and public transportation is limited. Some countries - for example Italy - have even completely locked down, meaning that citizens are not allowed to leave their house at all except for buying medicine or groceries. Leaving the house for other reasons is punishable by large fines. The majority of the planet is under some degree of quarantine due to the novel coronavirus disease (COVID-19). The present research discusses how this unprecedented crisis is portrayed by German newspapers. In order to give context, a brief summary of the defining events in the coronacrisis is given. This is followed by an indication on the coronacrisis as a communication challenge. Lastly, an elaboration on the research question and sub questions and the analysed newspapers is given.

1.1 A timeline of the biggest international crisis since World War II

The virus, which attacks the respiratory system was first observed in Wuhan, China in late December of 2019 (Wang, Horby, Hayden & Gao, 2020) and identified as a novel form of coronavirus (CoV) in early January 2020 (Wang et al, 2020). The coronavirus "spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes" (World Health Organization, 2020). The most common symptoms people experience can be "fever, tiredness and a dry cough" (World Health Organization, 2020). Generally, the World Health Organization (2020) describes the coronavirus disease as a "mild to moderate respiratory illness" of which people are generally likely to recover without major special treatments. An exception to this according to the World Health Organization (2020), are several risk groups; mainly older people and people with some sorts of pre-existing diseases; their lives would be more likely to be seriously at risk.

Shortly after the first patient of the new virus died in China and other cases started to surface in other countries, Chinese authorities decided to isolate Wuhan, cutting off all public transportation. According to the New York Times (2020) the number of deaths had by then already reached seventeen. On January 30th, the World Health organization declared the Coronavirus a "global health emergency" (New York Times, 2020). Both infection and death rates started to rise not only in China but also increasingly in different countries on every continent. A public outcry occurred once the information was published that a Chinese doctor, Dr. Li Wenliang, now deceased, had previously warned about how dangerous the virus can be given the fact that it can spread very easily, and it became clear that Chinese authorities tried to cover this up (New York Times, 2020). In February the first death due to

Covid-19 in Europe was announced by French authorities and the virus continued to spread throughout Europe. Shortly after that, Italy went into total lockdown and became the new epicentre of the disease. On March 11th, the coronavirus was officially declared a pandemic by the World Health Organization (New York Times, 2020). More and more countries went on total lockdown or at least shut down public life to a large extent and scientists and researchers started working tirelessly to find a vaccine against the virus. On March 18th, Germany's chancellor Angela Merkel declared the coronavirus the "biggest challenge since [...] Second World War" (Bundesregierung, 2020). At that point, around 500,000 people had been infected and over 20,000 had died (World Health Organization, 2020). The coronavirus situation is generally characterized as "nonlinear and chaotic in nature" (Chen & Yu, 2020). This also becomes clear when looking at the development of the epicentres, with it first being China, then Italy and, currently the United States. Even with all the public safety measures that had been introduced worldwide, some showing success while others had not, just one month later, as of mid-April 2020, the number of confirmed cases had risen to over two million (World Health Organization, 2020), the number of confirmed deaths recorded in relation to the Coronavirus to around 140,000 (World Health Organization, 2020).

1.2 The coronacrisis as a communication challenge

As the biggest international crisis since World War II, the coronacrisis also poses some major communication challenges. As it is a global pandemic, the coronacrisis provokes a great sense of uncertainty among the general public (Keller et al, 2012). According to Keller et al (2012) pandemic communication is difficult as it "takes place in distributed, uncertain and high-tempo environments" (p. 1). Information, even the information given by for example government officials or experts, in such uncertain times is often "ambiguous" (p. 1), due to the uncertain nature of the crisis. Especially in the case that the disease is completely novel, like Covid-19 is, "outbreaks can be difficult to anticipate, detect, diagnose and track [...] [and] as some questions become settled, new uncertainties can arise" (Keller et al, 2012, p. 5). The fact that no one, not even experts, can really predict with absolute certainty what impact an arising pandemic will have, "the potential mortality, morbidity and life disruptions" (Vaughan & Tinker, 2009), how quickly it will spread, where the main areas of concentration will be or how it might develop over time (Keller et al, 2012) is worrying for a society. From a communication perspective, the fact that the "information environments [are] [...] equivocal" (Keller et al, 2012, p. 6) is a major challenge. Equivocality of information is especially "problematic" (Keller et al, 2012, p. 7) in such uncertain times and in the worst case could lead to a complete "collapse of sensemaking" (p. 7). This is significant as it means that messages that are sent can be confusing to the receivers of these messages when they are

trying to make sense of them, meaning that they could struggle to understand what is happening around them. The need for a clear, less equivocal information environment is a pressing issue that a society faces during the coronacrisis.

Many different actors try to make sense of the coronacrisis during this time. This means that, because these actors can come from all sorts of different backgrounds, there is not only a lot competing information itself but also many competing sensemaking attempts and therefore opinions. These attempts can be shared through various channels such as traditional media sources such as television and newspapers and also multiple platforms on the internet (Vaughan & Tinker, 2012), meaning that the general public is exposed to these competing ways of sensemaking. Some parties in that regard actually profit from such a crisis situation. Parties like this would for example be actors who promote conspiracy theories and “fake news” (Lazer et al, 2018) by using the uncertainty within the general public as many citizens are already worried about their health, their financial stability and their future (Betsch et al, 2020). This could also already be observed during the current pandemic. Other actors that are commonly known for using events like this for themselves are populists and extremists (e.g. Engesser, Ernst, Esser & Büchel, 2017; Engesser, Fawzi & Larsson, 2017; Stier, Posch, Bleier & Strohmaier, 2017). However, while it can be true groups like these in particular use this crisis for their own benefit, it does not mean that this is also the intent behind every sensemaking attempt. Rather, trying to make sense of a crisis like this is something that is natural to humans (e.g. Keller et al, 2012; Vaughan & Tinker, 2012) and therefore does not only apply to extremist actors but all parts of society. Thus, the competing ways to make sense of the crisis is also a communication challenge.

During a pandemic, citizens play an essential role when it comes to containing it (Vaughan & Tinker, 2012) by choosing to comply or in some cases not comply with hygiene recommendations or other regulations. It is therefore also important how the risk situation is understood. When the risks of the coronacrisis are overpresented by communicators, this could lead to mass hysteria or a state panic in a society, whereas, when a risk is underpresented, it might be the case that citizens do not understand the gravity of a situation and act recklessly. In the case of the covidcrisis, both of these behaviours could already be observed. On the one hand there are individuals that fall into a state of hysteria and try to protect themselves by panic induced actions such as panic buying. On the other hand, there is also a number of people disregarding the situation and even protesting government measures that had been set in place for their protection on the basis of arguing that the protection measures would hurt their rights instead of benefitting them. Thus, another challenge for communication in the context of the Covid-19 pandemic is the question of how to portray and inform about the risks that it brings with in a balanced way in order to prevent extreme reactions.

1.3 Research aim and questions

One major news communication source that citizens are exposed to on a daily basis is the news media in the form of newspapers. The way that the coronacrisis is made sense of is also related to how citizens behave (Vaughan & Tinker, 2012). Due to the uncertainty of a pandemic situation, information can change as the disease is further researched (Vaughan & Tinker, 2012). The news media then reports on the developments and new information about the situation. Additionally, as previously pointed out, the way that a situation is made sense of depends also on the actor making sense of it. Therefore, the way that newspapers with different political orientations report about the coronacrisis could differ. This is what will be examined in the present research. This study has two aims. Due to the rapid development of the situation, with new changes almost every day, the first aim of this research is to examine how the framing of the coronavirus has changed from when it was first reported on in German newspapers at the start of January 2020 until now, April of 2020. The second aim of this paper is to explore how two different German news outlets with different political orientations, *Süddeutsche Zeitung* and *Die Welt* differ in their framing of and reporting about the coronavirus situation. Therefore, this research attempts to answer the following research questions and sub questions;

RQ: How did the German news outlets Süddeutsche Zeitung and Die Welt report on and frame the Coronavirus from the beginning of the crisis around the first of January 2020 until now, the first of April 2020?

SRQ 1: How did the framing of the Coronavirus develop over time?

SRQ 2: What are similarities and differences between the way that Süddeutsche Zeitung and Die Welt framed the Coronavirus?

The two German news outlets that were compared to each other are the left-leaning newspaper *Süddeutsche Zeitung* and the right-leaning newspaper *Die Welt*. Polisphere (2017) published an analysis of the media landscape in Germany, regarding political orientation and standards of reporting for many major national news outlets. A visualization that the organization had created on the basis of that analysis can be found in Figure 1. *Süddeutsche Zeitung* and *Die Welt* are appropriate representatives, as they seem to each lean in one of the directions and have a relatively similar quality standard. Furthermore, both are national newspapers that are published daily and are respected and relatively popular in Germany. It should be noted that, while the newspapers appear to lean in a political

direction, neither of them falls on an extreme side of the political spectrum. While it would have also been interesting to analyse magazines or newspapers at the extreme ends of the spectrum, it was deliberately chosen to study more leaning but still close to the centre newspapers, as these newspapers target the general public, and therefore a larger amount of people, whereas the more extreme magazines, on both sides, seem to reach less people and also only a very specific group of people. In a crisis like this, affecting every member and part of society, it makes sense to analyse news outlets which are more influential to a larger group of citizens. Analysing the framing and development of framing for the more politically extreme oriented newspapers and magazines would be interesting, however, this paper prioritizes the two larger news outlets *Süddeutsche Zeitung* and *Die Welt*, as more citizens might ultimately be affected by the framing, making this a more pressing issue at this point in time.

Figure 1: German media outlets across the political spectrum (Polisphere, 2017)

contribute to a better understanding of how the coronacrisis is framed by the newspapers and can therefore also give insights in how their readers, the German citizens, understand the crisis. The following report consists of six parts. After this introduction to the topic, relevant literature is reviewed in order to highlight some theoretical dimensions of the issue, describing different perspectives on the role of news media and framing as well as exploring how previous crises were framed. This is followed by an elaboration on the research method that was used in order to answer the research question and sub questions. Fourth, the results will be presented. Section five is a discussion of the results as well as the research in general and lastly, section six contains some final conclusions that could be drawn from this study.

2. Literature Review

News media, in this case newspapers, can be a significant source that citizens use in order to inform themselves and make sense of events that are happening around the world and outside of their own perception realm. Newspapers can affect the public perception of the coronacrisis by the use of frames (Matthes & Schemer, 2012). This literature review will explore existing literature on news media, framing in general and framing regarding other crises. Firstly, different roles that the free media can take in general and in crisis situations will be highlighted. Secondly, an elaboration on different perspectives on framing is given. Thirdly, an exploration of how other global crises were framed in the media is explained which is followed by some final conclusions that have implications for the present research.

2.1 *News media*

As the coronacrisis is affecting the whole planet, it is a global crisis and a major topic within a majority of the countries' public and media discourse. The coronavirus affects not just the health and medical systems all over the world but subsequently also the economic and political climate. Threats that the virus brings with it are thus very diverse and affect multiple different aspects of life and society. The topic is very frequently reported on by news media. This section first discusses different roles of the news media in society in a broader, more general context. Following this, the interplay between the news media, the government and the media in a crisis situation is elaborated on. Lastly, some conclusions will be given.

2.1.1 *The news media as a source of information*

The news media is a major institution within a society and fulfills a multitude of functions. Miles and Mores (2007) state that a key function of news media is to "spread information to the populace" (p. 366). Additionally, Zucker (as cited in Brown & Deegan, 1998) generally describes the function of the media as opening up a second world, other than the one that oneself can perceive through own experiences. He writes: "people [...] live in two worlds, a real world and a media world. The first is bounded by the limits of direct experiences of the individual [...]. The second spans the world bounded only by the decisions of news reporters and editors" (Zucker, as cited in Brown & Deegan, 1998, p. 25). According to Lippman (as cited in Papacharissi & de Fatima Oliveira, 2008) this "pseudoenvironment" (p. 52) provided by the news is relied on by citizens in order to be informed about events that are not experienced in person. It becomes clear that citizens may turn to media as a source of information about issues that they do not experience themselves but still care and want to learn about. In line with this, Robinson and Levy (1996) also see the news media as an

important institution for an informed society. Miles and Mores (2007) refer to this information function as the “social utility” (p. 366) function. They view the free news media as some sort of “social capital” (p. 366) that can contribute to a more equal society, by sharing news and information to all members of society alike. This function is also recognized by Feller (2015), labelling it the “public-interest function” (p. 86). Therefore, one important function that the news media fulfills is that it informs members of society about current events by reporting about them and therefore making information easily available.

2.1.2 The free press as a pillar for democracy

With regards to the previously discussed information function, it can be said that the free news media also plays a major role in maintaining a democracy. The free press is often referred to as a pillar for a democratic society (e.g. De Vreese, 2005; Feller, 2015). According to Feller (2015) this is due to the news media’s function of being the “fourth estate” (p. 86), next to “the different branches of the government – an executive that is separate from the legislature and judiciary” (p. 86). He states that the free media basically “keeps an eye” (p. 86) on actions that the government takes in various contexts. This function of the media to ensure that possible misconduct by for example governmental institutions cannot be covered up but rather uncovered and criticized is also often referred to as the watchdog function (e.g. Feller, 2015; Matthes & Schemer, 2012; Stone, O’Donnell & Banning, 1997). Stone, O’Donnell and Banning (1997) emphasize that “the press is supposed to serve as an overseer of the government” (p. 86) and identify this as a key function of journalism. In democratic societies this function is generally considered very valuable and the ability of journalists to report freely and independently is protected by law (Feller, 2015). Therefore, it can be said that, related to the previously discussed information function, the news media also has the function of watching and criticizing government actors and thus informing the citizens about possible misconducts committed by these actors, which can contribute to a more stable democracy.

2.1.3 News media coverage as a determinant of public opinion

The amount of news coverage an issue receives can have an influence on how much attention the audiences pay to the topic at hand. According to agenda setting theory “increased media attention is believed to lead to increased community concern for a particular issue” (Brown & Deegan, 1998, p. 25). This means that if an issue is often discussed in news media, the attention that citizens pay to the topic can rise. Brown and Deegan (1998) explain that “media are not seen as mirroring public priorities; rather, they are

seen as shaping them” (p. 25). McCombs and Valenzuela (2007) agree with this and state that “due to time and space constraints, the mass media focus their attention on a few topics that are deemed newsworthy” (p. 45). The topics that are deemed so by the media are to an extent determined by a “self-referential system” (Miles & Morse, 2007, p. 366). When a topic is often thematised in newspapers, this can lead to media hypes. Vasterman (as cited in Miles and Morse, 2007) suggests that “media hypes are triggered by unusual or shocking events” (p. 366). The types of events cause news media to “hunt [...] for ‘newer’ news on the topic” (p. 366), thus, the topic of interest is constantly gaining media attention. As Vasterman (as cited in Miles & Morse, 2007) postulates, “once a topic gains a certain level of attention in the media, it attracts more attention, and, because it attracts more attention, it becomes more noteworthy” (p. 366). He calls this phenomenon a “self-referential system [that] creates positive feedback loops, expanding the news waves” (p. 366). Therefore, a lot of attention to a topic by the media leads to more attention to the topic by the media, often at the expense of other, unrelated topics (Vasterman, as cited in Miles & Morse, 2007). McCombs and Valenzuela (2007) suggest that topics that become leading in media discourse therefore also become “prominent in public opinion” (p. 45). Thus media can “influence which issues [...] as the most important” (McCombs & Valenzuela, 2007, p. 45) which is often referred to as the “agenda setting role of the mass media” (p. 45). Therefore, another function or ability of the news media is to draw the attention of their audiences to topics that are considered important.

2.1.4 News media as a mediator in crisis situations

While the media roles that were previously discussed are certainly also applicable in crisis situations, there is one more function that can be highlighted especially in a crisis context; the mediation function of the media. In a crisis situation such as a pandemic, there are many actors, however, two major actors are expert researchers and the government (Vaughan & Tinker, 2009). As stated in the introduction, there is a great sense of uncertainty within crises situations like this (Keller et al, 2012). This uncertainty is also present among experts. Scientific discourse varies among researchers and opinions differ. In the case of a pandemic, medical and health experts are key actors (Keller et al, 2012). A second key actor in a pandemic is the government. During a pandemic, governments and researchers in the health field work closely together (Vaughan & Tinker, 2009). The experts provide their knowledge and research about a pandemic and facilitate new research to work on solutions. The government relies on expert opinions to formulate recommendations for citizens and in set in place regulations and policies. Health professionals and researchers are experts in the field. However, it should be mentioned that their estimations and opinions also often differ from

each other, resulting in debates and disagreements among the experts. Their knowledge is mostly highly scientific and hardly understandable for anyone who may not have the same background. During a crisis the need for information in the general public is high (Yoo, Choi & Park, 2016). Protection measures that the government sets in place on the basis of researchers recommendations are communicated, often with a critical view, via various media outlets. Taking into account the complicated factors that play into a pandemic and the need of the public to be informed aspects such as protection measures one critical task of the news media is to translate the technical expert knowledge into messages that laypersons can understand and make sense of (Mayor, et al 2012). In general, "disease outbreaks tend to be apprehended differently by the public than by experts" (Mayor et al, 2012, p. 1012) due to the different levels of knowledge that they have. Mayor et al (2012) argue that, when "entering the public arena, scientific knowledge is gradually transformed through media communication" (p. 1012). By translating scientific facts into information that laypersons can understand, the news media is crucial for an informed, equal and democratic society (Miles & Morse, 2012) because, as Putnam (as cited in Miles & Morse, 2012) puts it, it can be "a powerful force for bridging social differences, nurturing solidarity and communicating essential civic information" (p. 366). This relates also to the previously identified roles that the news media can play in general. Therefore, one more role of the news media in crisis situations is to be sort of a mediator between the general public, the government and experts and to thereby inform a society about ongoing developments.

2.1.5 Societies without free news media

It should be noted that news media coverage on major crisis, even on global events, can vary depending on the form of the government in different countries. The present literature review mainly focuses on the media in democratic societies, however, Tian and Stewart (2005) propose that factors like the culture but also political system and how free the people and the press in each country are influence media discourse and news coverage on events. While, as established, the free press in democratic countries fulfills the function of uncovering and criticizing different governmental actions, this is often not possible in states that do not allow the press to be independent or exercise censorship. For instance, Barnum et al (as cited in Ding, 2009) postulate that "the concept of writing for lay readers or the general public is not yet recognized as a need" (p. 332) in multiple cultures that are "non-Western" (p. 332) such as China. In the case of a different pandemic, the SARS pandemic 2003, China had indeed instructed their media to not report about the situation and therefore deprived the public of information about the outbreak and excluded it from "access to knowledge about emerging risks" (Ding, 2009). This resulted in the general public trying to inform themselves

by different means such as websites or word-of-mouth, which predictably resulted in even more uncertainty and confusion within the Chinese public, as not all of these alternative sources from the internet were reliable (Ding, 2009). A similar course of events could be witnessed in South Korea during the MERS outbreak in 2012 (Yoo, Choi & Park, 2016). The South Korean government had requested the news media to not share information about the outbreak which lead citizens to look for information about this on social media networks (Yoo, Choi & Park, 2016). With regard to this, it can be said that when the previously identified information function of the free news media cannot be fully executed in such uncertain times, people may try to turn to alternative sources for information without being able to trust the reliability of these. This could ultimately result in an even more confused society rather than an informed one.

2.1.6 Conclusions from the news media literature

Looking at the discussed literature, three main roles of the news media become apparent. Firstly, the news media seems to be an easily accessible and essential source of information for all citizens and therefore also is important to keep a society informed about current events. Secondly, the free news media is a basic requirement for a functioning democracy, as it can be critical towards governments and other actors, uncover misconduct and inform the citizens on these issues. Thirdly, according to agenda setting theory, the amount of news coverage an issue receives has an influence on how much attention is paid to that issue by the general public. There is, however, one more major role that the news media has. It can not only determine how much attention an issue receives from the audience, but also how the issue is perceived in general by using different framing techniques (e.g. Chong & Druckman, 2007; De Vreese, 2005; Matthes & Schemer, 2012; Miles & Morse, 2007). As framing is a focal point in this research, a separate, more elaborate section on different perspectives on news framing and its role is given in section 2.2. Conclusively, it can be said that the news media is important for society in many regards, regardless of whether a society is in a particular crisis or not. It takes on the roles of informing, criticizing, bringing attention to topics and mediating between experts, the government and the general public. However, whether these functions can be utilized to their full extent depends on how free the media can execute them; in countries that tend to control or censor the news media for example, the information function and the watchdog function are compromised.

2.2 Framing

There is a plethora of scientific literature regarding the topic of framing. However, there does not seem to be a consensus among scholars when it comes to a concrete definition of framing. As De Vreese (2005) explains "the term framing is referred to with significant inconsistency in the literature" (p. 51). Matthes (2009) agrees with that and additionally states that it may be hard to find one general definition of framing, as frames can be found in different contexts. Nevertheless, for the purpose of this study, some perspectives on definitions will be reviewed in order to come to a definition that fits the context of this study. Next, effects that news frames can have will be discussed and an elaboration on how this affects society will be given. Since there appear to be many different types of frames, some types of frames that are important for the context of this research will also be elaborated on. Finally, it will be examined what types of newspapers use framing followed by some final conclusions.

2.2.1 Defining framing

Perspectives on a concrete definition of framing differ among researchers. An example of defining framing could be highlighting certain aspects of a story or event for the purpose of promoting a political campaign (Matthes & Schemer, 2012), however, framing also occurs in everyday newspapers (Matthes & Schemer, 2012; Matthes, 2009; Papacharissi & de Fatima Oliveira, 2008). Since news frames are the focal point of this research, the subject of framing will be discussed with a focus on the journalistic news media context. Entman (as cited in Matthes & Schemer, 2012) proposes that the "basic idea of the framing [...] perspective is that by selecting some information and highlighting it to the exclusion of other information" (p. 320) a specific picture of an ongoing situation can be created by news outlets. Chong and Druckman (2007) identify the idea that specific issues have many aspects and can thus be seen from a myriad of perspectives as the "major premise of framing theory" (p. 104). They refer to framing as "the process by which people develop a particular conceptualization of an issue" (Chong & Druckman, 2007, p. 104). They also agree with Entman (as cited in Matthes & Schemer, 2012) that this can, amongst other things, be done by emphasizing specific factors more than others. De Vreese (2005) puts it as follows; "a frame is an emphasis in salience of different aspects of a topic" (p. 53). In contrast, Gillespie, Richards, Givens and Smith (2013) additionally identify other components that can shape a media frame, namely "sources, word choice or language, and context" (p. 225). This suggests that a picture of a situation can not only be created by *what* information is emphasized, highlighted or, in some cases, withheld; rather, the view on a specific issue (Chong & Druckman, 2007) can also be

altered on *how* it is talked about. In line with that, Wallis and Nerlich (2005) acknowledge that framing can also depend on “linguistic” (p. 2629) or “metaphorical” (p. 2629) tools. One definition of framing that seems to be widely respected and used rather commonly in framing research, especially concerning framing in a journalistic context, was proposed by Entman (1993) and reads as follows: “To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and / or treatment recommendation for the item described” (Entman, as cited in Papacharissi & de Fatima Oliveira, 2008). The present study makes use of Entman’s definition of frames. The reason for this is that this research focuses on how newspapers frame the Corona Crisis. Therefore, it is fitting to use a definition that was specifically formulated to use in a news media context. However, the present research does not only acknowledge, as written in this definition, the salience of the aspects that are reported on, but also the role that language and how a matter is talked about (Wallis & Nerlich, 2005; Papacharissi & de Fatima Oliveira, 2008).

2.2.2 Framing effects

News frames can have significant impacts on how their readers perceive an event or situation and thus are important to consider in many regards. These impacts are known amongst scholars as framing effects (e.g. Matthes, 2009; Matthes & Schemer, 2012; De Vreese, 2005). According to Chong and Druckman (2007) “framing effects occur when (often small) changes in presentation of an issue or event produce (sometimes large) changes of opinions” (p. 104). In contrast, Matthes and Schemer (2012) point out that the framing effects differ from the effects of actual persuasion. They explain that the direct effect of framing is more that people interpret and issue whereas the outcome of persuasion would be that an issue is evaluated or an attitude or opinion is formed. According to Matthes and Schemer (2012) “framing is about how people contextualize issues, not about” (p. 321) forming an opinion. Nevertheless, the researchers do come to the conclusion that framing is to some extent still related to forming attitudes as “every framing effect is potentially a persuasion effect” (p. 321). They argue that when some aspects are considered more than others, this can influence the formation of opinions as well. Chong and Druckman (2007) recognize the significant role that news frames play when it comes to influencing individual opinions and emphasize that “they affect the attitude and behaviour of their audiences” (p. 109). Papacharissi and de Fatima Oliveira (2008) find that “frames present a central part of how individuals cognitively comprehend [...] events” (p. 53). De Vreese (2005) holds a similar position, postulating that the frames that can be found in news media “affect learning, interpretation, and evaluation of issues and events” (p. 52). He explains that when

individuals are exposed to frames, they may experience an alteration of their attitudes concerning an issue (De Vreese, 2005). Taking all of these findings into account, it can thus be said that news frames, regardless of whether they are intended to do so or not, can ultimately form the opinion of their readers.

Since news frames impact the perception of an event by their readers, there are subsequently also larger scale effects outside of the individual readers cognition. De Vreese (2005) also differentiates between individual framing effects as described beforehand and framing effects on a "societal level" (p. 52). On the larger scale level regarding society, De Vreese (2005) points out that "frames may contribute to shaping social level processes such as political socialization, decision making and collective actions" (p. 52). Given that these factors are major parts of the public life, it becomes clear that the impact that news frames can have on society are not to be underestimated. Tuchman (as cited in Chong & Druckman, 2007) goes as far as to say that frames in news communication "organize [...] everyday reality" (p. 106) for a society. Gamson and Modigliani (as cited in Chong and Druckman, 2007) argue that they do this by attaching "meaning to an unfolding strip of events" (p. 106). Thus, news frames can have a lot of meaning for a society as a whole.

2.2.3 Types of frames

There are many different types of frames. A commonly used distinction between frames is that there are issue specific frames and generic frames (De Vreese, 2005; Oh & Zhou, 2012). Issue specific frames are "pertinent only to specific topics or events" (De Vreese, 2005, p. 54) meaning that they are not generalizable and can only be found related to one topic. On the other hand, generic frames are more generalizable. They "transcend thematic limitations and can be identified in relation to different topics" (De Vreese, 2005, p. 54). There are a number of generic frames that have been often referred to in scientific literature. Among scholars who are researching news frames in particular, a plethora of different types of "thematic frames" (Oh & Zhou, 2012, p. 262) have been widely researched, acknowledged and utilized. Beaudoin (as cited in Oh and Zhou, 2012) for one mentions a "responsibility frame" (p. 261), by which he means a frame that highlights responsibility and sometimes blame aspects of a situation. Another thematic frame is called "economic consequences frame" (Beaudoin, as cited in Oh & Zhou, 2012, p. 261) and is, as the name suggests, a frame that highlights consequences for the economy. Furthermore, there is a frame discussing different risks that a situation has for different parties, the "risk frame" (Beaudoin, as cited in Oh & Zhou, 2012, p. 261). One more interesting type of frame is the "human interest frame" (Beaudoin, as cited in Oh & Zhou, 2012, p. 261); a frame that takes persons or individuals as the focal point of the story. A frame that could also be identified is

the “severity frame” (Beaudeau, as cited in Oh & Zhou, 2012, p. 263); a frame that indicates the severity of a situation. Additionally, Semetko and Valkenburg (as cited in Oh & Zhou, 2012) identify a “morality frame” (p. 263) and a “conflict frame” (p. 263) that can be used in news reports, with the former focusing on moral aspects and the latter reflecting on “disagreement between individuals, institutions or countries” (Cappella and Jamieson, as cited in Bartholomé, Lecheler and de Vreese, 2017). Di Gregorio, Price, Saunders and Brockhaus (2013) identify four more distinctions between frames; “diagnostic, prognostic, symptomatic [and] motivational” (p. 5) frames. Diagnostic frames according to the researchers are closely related to what Oh and Zhou (2012) labelled a responsibility frame, as they share information about what the problem is and sometimes who or what is to be blamed for it. A frame is prognostic when it gives some sort of prediction on how a situation is going to develop or be solved (Di Gregori et al, 2013). A symptomatic frame focuses the causes of an issue or problem (Di Greogori et al, 2013) and lastly, a motivational frame “puts forward moral or motivational reasons why [...] [one] should be concerned about the problem” (Di Gregori et al, 2013, p.5). Although those are not the only relevant types of frames in framing research, they are particularly fitting for a newspaper context.

2.2.4 Newspapers using frames

All sorts of different newspapers along the political spectrum use framing to some degree. Chong and Druckman (2007) point out that there usually is a rather “negative connotation” (p. 120) when it comes to frames. De Vreese (2005) recognizes the function of the free media as “a corner stone institution of [...] democracies” (p. 51). Batholomé, Lecheler and de Vreese (2018) point out that “Western journalists greatly value objective reporting” (p. 1690). Due to this important function and value it is often criticized that framing is a threat to this objectivity and can result in the formation of public opinions. News frames published by outlets that are orientated in a more extreme position on the political spectrum sometimes “mimic [...] [frames] used by politicians” (p. 109). In line with this, Oh and Zhou also (2012) propose that “elites such as politicians and other influential persons provide frames that are reproduced in the press” (p. 263). However, also more centred or only slightly leaning news outlets use frames. It should be noted that, as there are several different news outlets within a democratic society, people are being exposed to frames that are competing with each other (Chong & Druckman, 2007). One news outlet may frame an issue or event in a different way than another news outlet. As Chong and Druckman (2007) explain “public opinion formation involves the selective acceptance and rejection of competing frames that contain information about [...] issues” (p. 120). They further state that the framing effects only negatively affect societies if its members “never develop a basis for discriminating among

frames” (p. 120). Researchers such as Matthes and Schemer (2012) see framing as something that is intrinsic to reporting about events and that therefore occurs in all types of media. Especially in a context that requires translation of highly scientific knowledge into something that laypersons can understand this is relevant, as oftentimes, journalists are also not experts on the corresponding topic (Mayor et al, 2012) and therefore have to make sense of the topic for themselves as well. It can thus be said that, while framing is critiqued by some for being manipulative and is believed to be typically part of more extreme oriented news outlets, it can actually exist in all news outlets.

2.2.5 Conclusions from the framing literature

To conclude, it can be said framing exists in different contexts and therefore there are multiple perspectives on what framing can be defined as. Even within the context of news framing, researchers seem to have different perspectives on what defines a frame. For the present study, one widely respected definition proposed by Entman will be utilized, as it fits the journalistic context of this study. However, this study also factors in linguistic aspects that the definition by Entman did not take into account. News frames appear to have multiple effects on audiences that can result in the formation of attitudes and opinions about events. These formations happen within the mind of the individual reader. However, they may have a subsequent impact on society as a whole, because especially larger daily newspapers attract a large audience. There are also a myriad of different types of frames that newspapers can apply to a situation. While news frames seem to have the reputation of mostly used by very biased outlets, they are being used by many different newspapers.

2.3 Lessons from the SARS crisis 2003

The Covid-19 situation is unprecedented and therefore hard to compare to any other crisis that the world has experienced in almost a century. Although that is the case, examining a past crisis that were of interest to news media may give at least an indication of what to investigate when researching how Covid-19 is framed by newspapers.

Severe acute respiratory syndrome-related coronavirus or SARS was a pandemic that took place in 2003 (Luther & Zhou, 2005). As the name suggests, the SARS virus belongs to the same family of viruses as the Coronavirus that results in Covid-19 and also has parallels to Covid-19 when it comes to symptoms, transmission and contagiousness. Furthermore, SARS also originated in China (Wallis & Nerlich, 2005) and the spread to other regions. However, the SARS crisis never developed into a threat of the same dimension as Covid-19 has. In total, there were around eight thousand cases of SARS worldwide of which eight

hundred were fatal (Wallis & Nerlich, 2005). While the scale of SARS was still arguably smaller than the one of Covid-19, the “previously unknown and severe infectious disease” (Wallis & Nerlich, 2005, p. 2629) still received a large amount of media coverage from news outlets around the world (Wallis & Nerlich, 2005; Oh & Zhou, 2012; Tian & Stewart, 2005; Luther & Zhou, 2005), in part also due to “disproportionate economic impact” (Smith, 2006, p. 3113) the crisis had. However, as Tian and Stewart (2005) point out, the news coverage on the topic varied, depending on the news outlet.

There were a number of factors that played a role in the news framing of SARS. A study conducted by Wallis and Nerlich (2005) has shown that *language and the use of metaphors* were an important factor to consider. Wallis and Nerlich (2005) state that usually there are two widely spread metaphors when it comes to reporting about diseases and health crisis; the “war metaphors” (p. 2632), which they identify as “the standard metaphor system for disease in the west” (p. 2632) and the “plague metaphor” (p. 2633). An example of using a war metaphor would be for example statements such as “the war on cancer” (Wallis & Nerlich, 2005, p. 2632), however, the war metaphor does not necessarily need to use the term war, but incorporates “militaristic language” (p. 2629) in general. This type of metaphor has often been criticized as it can be the cause of “shame and guilt” (Wallis & Nerlich, 2005, p. 2630) for the people that are actually suffering from the disease. The plague metaphor on the other hand was found to be important when it came to framing the HIV / AIDS. Writers appeared to have used the metaphor of the plague as a “benchmark” (Wallis & Nerlich, 2005, p. 2633) of a “severe epidemic” (p. 2633). However, Wallis and Nerlich (2005) were surprised to find that, in the framing of SARS, newspapers seemed to have refrained from using these metaphors. The main “conceptual metaphor was SARS as a killer” (Wallis & Nerlich, 2005, p. 2629) and other commonly used metaphors were phrases like “SARS IS A CRIMINAL” (p. 2632) or “SARS IS A MYSTERIOUS ENTITY” (p. 2632). Metaphors seem to have been highly useful for the media in order to frame the SARS crisis.

There are more factors than the linguistic aspect when it comes to the framing of SARS. Wallis and Nerlich (2005) view the crisis as a highly politicized one. They point out that some populist newspapers used it in order to assign *blame* to China; i.e. proposing that the virus became a crisis due to “Chinese lies” (p. 2636) or characterizing Chinese citizens as “dirty” (p. 2635). Such explicit language was mostly used on the populist side, however, as Smith (2006) points out, even if Chinese citizens were not insulted like that, there did appear to also be some sort of *othering* (Leung & Huang, 2007) regarding Chinese people, also in more moderate news outlets. In example, Smith (2006) found that UK media explicitly described the Chinese as “so different” (p. 3118) from them. Wallis and Nerlich (2005) furthermore argue that there seemed to have been a “stigmatization of potential SARS carriers” (p. 2635), in a oftentimes covert but occasionally also very overt manner. The main

target of this stigmatization seemed to have been again “people of Chinese ethnicity” (p. 2635) or generally people with an “Asian appearance” (Smith, 2006, p. 3118). This position against China was also recognized by other researchers, i.e. Oh and Zhou (2012) also see an “anti-Chinese reaction” (p. 262), with citizens avoiding Chinese people, restaurants or stores. In general, as Lupton (as cited in Oh & Zhou, 2012) “when health issues are reported, blame is usually attributed to the affected or sick individual, leading to stigmatization” (p. 263). The Chinese government and people of Chinese ethnicity were therefore often seen as the villains of the situation. Referring to “heroes, villains and victims” (Miles & Morse, 2007, p. 366; Mayor et al, 2012, p. 1011) in a health crisis situation is rather common and also occurred during the H1N1 outbreak in 2009. While Chinese people were identified as the villains, risk groups were seen as the victims and health care workers as heroes (Mayor et al, 2012). According to Oh and Zhou especially the characterization of villains was also a major factor in framing the HIV/AIDS crisis with “gays and lesbians” (p.263) as the stigmatized party, the villains. Forming such “personified or dramatized representations of different collectives” (Mayor et al, p. 1012) as “social representations” (p. 1012) can be traced back to the need of the general public and lays to understand, make sense of and “symbolically cope” (Mayor et al, p. 1012) with the situation at hand. It should be noted however that in the SARS crisis especially this type of blame on the other hand resulted in other types of more rational *critique towards* the writers of these types of stigmatizing articles by multiple media outlets. Many journalists called out this behaviour and criticized the publishers for promoting racism, xenophobia and scapegoating (Wallis & Nerlich, 2005) which makes sense with regards to the critical watchdog function that the media has (Bartholomé, Lecheler and De Vreese, 2018; Feller, 2015). Therefore, *blame*, *othering* and *critique* in general appeared to have been part of the framing of SARS as well.

Another interesting attribute of news media coverage of SARS was the impact that the disease itself and the resulting crisis would have on the world. For example, there was uncertainty on how *severe* the crisis would be and *predictions* differed. The predictions on how the disease would spread for example were covered inconsistently (Smith, 2009); throughout the media there were “often [...] either warnings of an imminent pandemic or dismissals of the disease” (Wallis & Nerlich, 2005, p. 2633). Oh and Zhou (2012) also saw this lack of clarity; they argue that in general, how the news cover a crisis regarding health can lead to confusion and that the threats are often overrepresented. It was rather unclear for the most part how significant the situation would be and there were altercations about which term would actually apply to the SARS situation, “epidemic, pandemic or neither?” (Wallis & Nerlich, 2005, p. 2632). Smith (2009) actually distinguishes the prediction sentiments towards SARS in news media coverage in two phases. The first phase of the coverage according to Smith (2009) “characterizes the outbreak as a frightening threat” (p. 3118), with

the reporting being “overly pessimistic” (p. 3118), incorporating dramatic headlines and predicting that every single citizen of Hong Kong would eventually be infected. After this the second phase of media predictions had occurred which emphasized that the threat was far away and that SARS would soon be contained because of medical progress and safety measures (Smith, 2006). Therefore, in the case of SARS, like Mayor et al (2012) had also found for previous outbreaks like Ebola, the prediction frames seemed to develop from an “panic-inducing frame” (Mayor et al, 2012, p. 1013) to an “appeasing information” (p. 1013) frame. Due to the fast development of the situation and the uncertain situation, a large part of articles about the SARS virus also used some sort of *comparison to other diseases*, often the common flu or pneumonia; in fact, Wallis and Nerlich (2005) found that there were virtually more articles that related SARS to more known diseases than actual analyses and predictions about how the situation will develop. Thus, *predictions*, often by the means of *comparisons to other diseases*, seemed to also have been points of interest when it came to framing SARS.

Some parallels that the SARS crisis has with the Covid-19 situation are undismissible. Therefore, there are some lessons to be learned from the SARS crisis concerning the reporting on it. Firstly, during the framing of SARS, not only what was highlighted mattered but also the manner in which certain aspects were discussed from a linguistic standpoint. The way articles were phrased was not always only factual and neutral, rather, metaphors and dramatic language in general seemed to have been a major theme in SARS news coverage. Secondly, it appeared to be the case that the media had assigned roles to certain collectives, e.g. the victim role for risk groups and the villain role to Chinese citizens. The villanization of China was especially present in the right-wing and was understood by more center-oriented journalists as promoting hatred and xenophobia. These journalists had criticised such outlets, executing the rational criticism that is typical for more centered media outlets. Moreover, predictions, in terms of severity and development of the situation seemed to have been rather ambiguous at times and the messages have shifted over time, from framing SARS as extremely dangerous to framing it as a problem that is almost solved. Comparisons to how other diseases developed were also made to try and predict the outcome of SARS. Thus, some main factors in the framing of SARS were as follows; language and the use of metaphors, blame, critique, estimations of severity of the situation, predictions on how it would develop and comparisons to other diseases. Many of these factors have also been identified when it came to different health crises such as H1N1 or HIV. Therefore, it appears reasonable to suspect that when it comes to the framing of the coronacrisis, these aspects of framing could possibly emerge as well.

2.4 Conclusions from the literature and implications for this study

The central themes that this literature review discussed were the role of the news media, the concept of framing and an exploration of how news media framed the SARS crisis of 2003. While investigating the existing literature concerning the general role of the news media it became clear that an essential part of the news media's role is its ability to disseminate facts about current events to the members of a society. Secondly, it became apparent that the news media does not only have that function of observing events and informing about them, but can actually also criticize different parties, i.e. the government, and therefore is an important institution that can protect democracy. Third, news media have the role of setting the public agenda; a topic that is often reported on by the news media can become a public priority. During the exploration of the literature on the news media in crisis situations, another function became apparent; the function of the news media as a mediator. News media can translate highly scientific knowledge into facts that laypersons can also understand so they can make sense of crisis events. Another aspect that became clear while inspecting the literature is that these roles of the media cannot be executed to their full potential in every society alike; the extent to which they can be executed depends on the amount of freedom that the press is allowed by different forms of governments.

The second main theme that was explored by this literature review was the topic of framing. While researching about the topic of framing, it was highlighted by many different authors that framing exists in different contexts and therefore there is no universal definition of it. Opinions on what makes a frame seem to differ. However, in the journalistic and media context that this research focuses on, framing seems to incorporate both, *what* aspects of events are included or excluded, and *how* the event in question is reported on also regarding linguistic aspects. The literature showed that the consequences of framing can be present within individuals, as they can influence opinions and attitudes, and therefore also have societal effects. Furthermore, frames appear to have a multitude of different focal points and there seem to be a myriad of different types of frames. Lastly, framing scholars emphasize that framing, especially in a news reporting context, can but does not always exist on purpose or in order to persuade audiences; rather, it seems to be something that is an inherent characteristic of reporting. It becomes clear that framing is a major part of news reporting and can have intense societal impacts.

The third focal point of this literature review was how the news media framed different health crises with a focus on the SARS crisis of 2003. The literature suggests that the SARS crisis of 2003 was a major topic in the news media at the time and was framed differently by different news outlets worldwide. In the framing of SARS metaphors and a rather dramatic language were often used frequently in different media outlets. Furthermore, news outlets

seemed to have divided roles within society into victim, villain and hero groups. Especially the villain role was a major factor and was often assigned to China and Chinese citizens and they seemed to have been blamed for the outbreak of the crisis. However, with regards to the previously identified watchdog function of the media, this type of villainization was also called out by some newspapers. Predictions on the severity of the situation and its impacts appeared to also have been part of the media discourse surrounding the crisis and seemed to have been one, ambiguous and two, changed over time. Scholars suggest that these predictions furthermore were guided by comparisons to other diseases.

For the present research, the explored literature has some implications. The news media appears to have a large influence on their audiences with the way they report about situations. Especially in a public health crisis caused by a contagious virus, like the coronacrisis, how citizens perceive the crisis and the way they behave directly affects the development and outcome of the situation. While exploring the literature, it became quite clear that how news media frame a crisis could possibly influence their audiences to behave a certain way, whether this is intended or not. This again highlights the relevance of this research, arguing for the importance to reflect on the framing of the crisis and therefore to an extent also on how the situation might have been perceived by the audiences of the two newspapers. There are also some implications that give indications on what to pay attention to when analysing the articles by the two newspapers. First, other than what is actually written in the articles, there needs to also be a focus on how it is written, meaning what kind of language is used; this can be an indicator of the underlying sentiment of the articles. However, what is reported on in the situation is arguably also crucial. Furthermore, when examining the literature on the framing of SARS, many studies by different scholars seemed to have found the same news framing patterns in the framing of SARS that were also found in preceding health crises. If these patterns were already present in other health crises and during SARS, there could be reason to believe that they might also surface in the framing of Covid-19. Therefore, it makes sense that this study also takes this into account.

3. Method

In order to investigate how the coronacrisis has been framed by the two German news outlets *Süddeutsche Zeitung* and *Die Welt* over time and whether there are any differences between the two news outlets, a mixture of a quantitative and qualitative research design was employed. The method consists of a comparative content analysis of the two news outlets in question. This design is highly suitable for the purpose of answering the research questions and achieving the objective of this study. It would certainly also be relevant to take a purely quantitative or purely qualitative approach to analyse and compare the framing. However, it was chosen to combine the two. The research is qualitative, as it focuses on what is actually said about the situation, which is an important part of framing, instead of just exploring how many times a certain type of frame is mentioned. However, the quantitative aspects of framing cannot be disregarded either; as described in the preceding sections the frequency of reporting about different aspects is also an essential part of news framing. With regards to the research objective and the uniqueness of this situation in general, the value of applying this combination of qualitative and quantitative lies mainly in the possibility to uncover how the crisis is framed in a less superficial and more in-depth manner. The following section explains the method that was applied in this research. Firstly, an elaboration on the corpus and the sampling strategy for the corpus will be given. This is followed by a description of the codebook and a section on the reliability of it.

3.1 Corpus and Sampling

The corpus that was analysed for the purpose of this study consisted of 180 articles in total. Ninety articles were published in *Die Welt*, the remaining Ninety articles were published in *Süddeutsche Zeitung* (see table 1). The time frame in which the articles were published ranged from first of January 2020, around the time that the Coronavirus was first reported on by German news outlets, until the first of April 2020. All articles were found on the database Nexis Uni.

In order to assure that the sampling of the corpus of articles is adequate and as valid and reliable as it can be, some basic criteria for articles regarding inclusion of and exclusion from the analysis were established. Firstly, the articles had to be published by either one of the above mentioned news outlets. Additionally, the articles had to include the term Coronavirus or Covid-19 in order to ensure topical specificity. To further ensure this topical specificity, the articles had to be published within the given time frame.

Using these criteria, over ten thousand articles were found on Nexis Uni. Thus, due to the time frame and scale of this study, the amount of articles had to be narrowed down. This

was done as follows: firstly, it was decided to search for each news outlet separately. It was decided to analyse ninety articles of each news outlet. Due to the fact that this research also looks at how the framing of the crisis developed over time, it had to be assured that the corpus contained an adequate amount of articles over the whole time frame. In order to assure a relatively equal distribution of articles, to be able to properly analyse the development over time, three sub timeframes were formulated. Thirty articles per news outlet per time period were sampled. The first sub time frame ranges from the first of January 2020, when the virus was first reported on in the German newspapers, until the 30th of January 2020, the day that the coronacrisis was declared a global health emergency by the World Health Organization. This is a period of around four weeks. Secondly, there is sub time frame of the 31st of January 2020 until the first of March 2020. This sub time frame is a period of around four and a half weeks and during this time the virus was already spreading in every part of the world and had several countries on total lockdown. The last sub time frame was formulated from the second of March 2020 until the end of the general time frame of this study, the first of April 2020. Again, this was a period of four and a half weeks. In the middle of this last period, on the eleventh of March, the coronavirus was declared a pandemic by the World Health Organization, a major development in the crisis. Although the declaration of a pandemic was quite a milestone, it was deliberately decided to not use it as a start or ending point for one of the sub time frames. As news media, amongst other things, has been a predictor in previous crisis, as discussed in the literature review, it was decided construct the last sub time frame around the pandemic declaration of the World Health organization. This way it is assured to take into account the predictions about the severity of the situation as well as the immediate reactions after this major event.

The three sub time frames are applicable for both papers, *Die Welt* and *Süddeutsche Zeitung* (see table 1). However, it is quite obvious that the general number of articles increased over each period, as the situation developed rather quickly and more and more facts were discovered rapidly. Therefore, it was not possible to take the same sampling approach for every period, rather, the sampling strategy was adjusted to each period covered by each news outlet. To illustrate the need for this, one can look at the data that is listed for *Süddeutsche Zeitung* over the three periods as an example. While during the first period around one hundred and twenty articles were listed on Nexis Uni, the second period incorporated around eight hundred articles and the third period included about two thousand and eight hundred articles. Similar differences were also seen at the articles by *Die Welt*. Looking at this difference, it becomes clear that a general rule like taking every fourth article into account may make sense for the first period, however, this is not the case for the second and third period, as the desired sample size of thirty articles per time frame per news outlet would have been collected too quickly. This would mean that in reality, not the whole time

frame would have been taken into account. Since it is important to take into account articles from the start of the period until the end of it, a more adjusted sampling rule was applied. Due to the fact that it was the plan to take into account thirty articles per news outlet per time frame, the rule was to divide the number of articles found on Nexis Uni per news outlet per time frame by thirty. For example, the *Süddeutsche Zeitung* incorporated around one hundred and twenty articles in the first time period, this was divided by thirty, with the result of four. Thus, every fourth article found within that time frame for the *Süddeutsche Zeitung* was taken into account for the analysis. This principle was also applied to the remaining data groups. The exact sampling strategy per group can be found in Table 2.

Table 1: Composition of the sample

Sub time frame	Frequency	Newspaper
01.01.2020 – 30.01.2020	30	<i>Die Welt</i>
31.01.2020 – 01.03.2020	30	<i>Die Welt</i>
02.03.2020 – 01.04.2020	30	<i>Die Welt</i>
Total <i>Die Welt</i>	90	<i>Die Welt</i>
01.01.2020 – 30.01.2020	30	<i>Süddeutsche Zeitung</i>
31.01.2020 – 01.03.2020	30	<i>Süddeutsche Zeitung</i>
02.03.2020 – 01.04.2020	30	<i>Süddeutsche Zeitung</i>
Total <i>Süddeutsche Zeitung</i>	90	<i>Süddeutsche Zeitung</i>
Total Sample	180	Both newspapers

Table 2: Sampling strategy per data group

Data group	Total number of articles found on Nexis Uni	Sampling strategy
<i>Die Welt</i>		
01.01.2020 – 30.01.2020	48	Take ten articles, skip three, repeat
31.01.2020 – 01.03.2020	213	Every seventh article
02.03.2020 – 01.04.2020	598	Every nineteenth article
<i>Süddeutsche Zeitung</i>		
01.01.2020 – 30.01.2020	129	Every fourth article
31.01.2020 – 01.03.2020	840	Every twenty-eighth article
02.03.2020 – 01.04.2020	2734	Every ninety-first article

3.2 Codebook

In order to analyse the articles, a codebook was created. The full codebook can be found in Appendix B. The codebook was constituted using an inductive, bottom-up approach. According to Potter and Levine-Donnersteine (1999) “a theory is not always available to guide [a research] design” (p. 258). Arguably, due to the novelty and uniqueness of the current crisis, this is also the case in this study. While there is literature on news frames regarding previous pandemics, as elaborated in the literature review, these pandemics did not develop to the same extent that the coronacrisis has. Thus, an inductive bottom-up approach is useful in order to find a coding scheme that fits into this particular situation, also including codes that are very specific to this situation. In order to generate a first draft for a codebook, the researcher took a sample of fifteen articles that fit into the previously mentioned criteria. Using this sample a basis of what appeared to be the most prevalent codes and subcodes was found and systematically arranged into a draft codebook. This structure served as the basis for the codebook. Due to the fact that this was only a small amount of data, and that there was new information about the coronacrisis almost on a daily basis, the researcher familiarized herself with the data once again by reading through the all the articles and adding codes, mostly subcodes. The final codebook was constructed according to the following system; there were basically three levels of codes in the hierarchy. The first level consisted of the overarching categories that were taken into account. There were nine main categories that served as the first level basis of the codebook; these categories can be found in table 3. To each main category there was then a second level of codes, the subcategories. These subcategories were constructed in order to point to the context in which the overarching code was discussed and which specific aspect of the overarching code was written about. There was also a third level to the code hierarchy. This level was the level with the most specific codes. This third level of subcodes was constituted to really highlight what was actually said about the overarching codes and their categories and was arguably the most specific part of the codebook. How this system works exactly may be best illustrated by an example. One of the nine overarching codes was *Protection measures*. This code category was constructed in order to highlight statements that were made about protection measures against the virus. Since just highlighting that protection measures against the virus were mentioned does not go into depth enough given the objectives of this research, there was a second level on the code hierarchy, which consisted of several subcodes. Those subcodes served as indicators of what kind of protection measures were actually discussed. One of these discussed measures, therefore, one of the subcodes, were for example face masks. Since the mere highlighting of a discussion surrounding face masks still did not go into depth enough, the third and last level of codes

highlighted what was actually written about face masks. The codes on this level were about the actual content of the discussion surrounding face masks, i.e. discussing a *shortage* of masks or assessing the usefulness of these as *mandatory*, *unuseful* or *useful to an extent*. This general system, with the codes becoming more and more specific from the first level to the last level in the code hierarchy, was applied to all code categories. An exception to this are the first three code categories regarding the *News Outlet*, which was either *Die Welt* or *Süddeutsche Zeitung*, the *Publication Date*, which was coded in terms of one of the three previously established time periods and the *News section*, which highlighted where in the newspaper each article could be found, as well as the last code category, *Epicentre*. Those three code categories only had two levels, as they mainly served as quantitative codes and there was simply not any reason to add codes on the third level.

3.3 Reliability

After finalizing the codebook, the reliability of the codebook had to be assured. Using the full version of the codebook, a sample of ten percent (n=18) of the total number of articles (n=180) was coded by the main researcher and a second researcher in order to conduct the intercoder reliability test. This test was conducted in order to measure the agreement of the two researchers to ensure that the codebook is reliable and comprehensible for other researchers. The intercoder reliability test was conducted for every code category in the codebook and the result for each code category was over 0.6 and therefore guaranteed a substantial agreement between the researchers. The exact Cohen's Kappa values can be found in table 3. This meant that the codebook was suitable to be employed for the research and was used by the main researcher to code the remaining ninety percent of the data.

Table 3: Intercoder reliability level for each code category in the codebook

Code Category	Cohen's Kappa
1. News Outlet	1
2. Publication Date	1
3. News section	1
4. Predictions on	0.69
5. Critique towards	0.80
6. Protection measures	0.82
7. Comparisons to other crises	0.82
8. Language	1
9. Epicenter	0.72

4. Results

By applying the previously discussed research method, a number of results could be generated. These results will be discussed in the following section. First, the most important results of the first time period for both *Die Welt* and *Süddeutsche Zeitung* will be elaborated on. Secondly, the results for the two newspapers during the second established time frame will be displayed. Lastly, the results for the third period for the two news outlets will be shown.

4.1 First period

4.1.1 Die Welt

During the first time period, ranging from January first until January 30st, *Die Welt* discussed a plethora of different topics and aspects concerning the coronavirus. To give an indication of the overall most discussed categories, table 4 shows the frequency of statements that belong to the main categories. Frequency tables on the subcodes to the categories are listed in Appendix C. The exact discourse of these will be displayed in this section.

Table 4: Frequency of statements assigned to the overall categories (Die Welt, First Period)

Category	Frequency
4. Predictions	68
5. Critique towards	10
6. Protection measures	17
7. Comparisons to other diseases	36
8. Language	15
9. Epicentre	6

As can be seen in table 6, one facet that was highlighted by *Die Welt* more than anything else were predictions on how the situation surrounding the coronavirus would develop. Thus, this seemed to be a major focal point of the newspaper during the first time frame. The predictions concerned different topics. Firstly, since the beginning of the reporting about the coronavirus, some prognoses on the areas that it could possibly spread were given. The most prominent prediction on the spread of the virus was that the virus would mostly spread in *different countries in Asia* (n=5). Rather rarely, other predictions on the spread of the virus were made, for example that it could *spread to Europe* (n = 1), *the United States* (n = 1) or just *stays in China* (n = 1). One interesting observation is that, even at the very beginning of the situation, one article already mentioned the possibility of a *pandemic* (n = 1): “*Do we have to fear a pandemic?*”. Therefore, while the main message was that it was likely that the virus only spread in Asia, *Die Welt* did already at least consider the possibility of a larger

spread. Another aspect of the predictions that *Die Welt* has made was on the relevance for German citizens. A majority of the articles predicted that the virus would *not arrive in Germany* (n = 6), while some articles predicted that there would be *a few individual cases* (n = 3), however there were also articles actually predicting that the virus *will spread in Germany* (n= 5). The aspect that was mentioned the most were the possible impacts on the economy. Among these prognoses on the economy the aspect that was mentioned most was that there could be *negative effects on the market* (n= 14). These negative effects were mostly predicted in the context of the Chinese economy, however, many articles mentioned that how the Chinese economy develops can directly impact the economic situations of other countries, such as Germany, as well. For example, *Die Welt* wrote: “*The economic decline in China could become so severe that it will have direct impacts on the German economy, which is heavily dependent on the economy in China*”. A decline on tourism and airtravel was also often predicted (n = 5), as well as *struggling businesses* (n= 1) and a possible *rise in the stockmarket* (n = 2). *Die Welt* furthermore predicted that there could be a situation where the *demand of certain products will be bigger than the supply* (n = 1), specifically, the newspaper speculated: “*There could be a shortage of medicine, groceries and many other essential products*”. Thus, *Die Welt* emphasized a plethora of different negative outcomes that the coronavirus can cause for the economy. Predictions on how the virus will affect the daily life in Germany were not made during the first period, however, there were some predictions on how it would affect the German healthcare system should the virus actually come to Germany. The majority of the articles indicated that Germany was *well prepared* (n = 6) should the situation develop into something that was more serious for Germany. Only two times, suggestions that the healthcare system in Germany would be *underprepared* (n = 2) were made, i.e. “*Hospitals will be overloaded with sick people and also people who worry about their health*”. Thus, during this first period, *Die Welt* appeared to have a mostly positive view on the healthcare system in Germany. There were also some news messages that tried to predict the severity of the virus. The coronavirus was often estimated to be *contagious but not severe* (n = 5). However, the newspaper also highlighted that the virus can be *severe, but only for risk groups* (n = 5), i.e. “*The virus mostly affects elderly people and all deaths caused by the virus so far have been people with chronic illnesses*”. The newspaper also emphasized that the situation may not be very severe as the virus most likely *does not get transmitted by humans* (n = 1), e.g. “*So far there is no evidence that the virus can transmit from human to human*”. Therefore, it appears that *Die Welt* did not see the coronavirus as a very threatening virus during the first time frame. A possible development of vaccines was only discussed once with the code *development uncertain* (n =1). This is also in line with the few predictions the newspaper made on how the situation would end with articles predicting

that the situation will most likely *end quickly* (n = 2) and will not develop into anything serious, i.e. *“The chance of this situation developing into a global horror scenario is extremely small”*.

Die Welt also displayed critique towards several different actors. The Chinese government was the main target of critique from the newspaper. Mostly, the critique was regarding the measurements that the Chinese government had set in place to contain the virus, evaluating them as unnecessarily *too harsh* (n = 4). This was mainly used in the context of locking down Wuhan, which was criticised with quotes such as *“Not all epidemic experts are convinced by the Chinese mass quarantine, not only from a human rights perspective. The Ebola outbreak in West Africa has shown that using mass quarantine to fight an infectious outbreak is a very questionable measurement”*. The Chinese government was further criticised for *not being transparent* (n = 1). The German government was only once criticised for *assessing the situation of the coronavirus wrong* (n = 1). Distributors of “Fake News” were chastised for *spreading panic* (n = 1), distributing *conspiracy theories* (n = 1) and also *fostering racism* (n = 1) by stigmatizing people with an Asian appearance, i.e. *“Videos on social media were distributed were people with an Asian appearance were breaking down on the street.”* Another target of criticism were citizens in general for starting to engage in *panic buying* (n = 1).

Several different protection measures were reported on in the context of protection and containment of the virus. *Quarantine* was mostly assessed as *counterproductive or unnecessary* (n = 2), i.e. *“Even a large quarantine would not be able to contain the virus”*. However, it was mentioned that the quarantine can be useful for *affected people* (n = 2), meaning people who are either infected, were in contact with someone that was infected or have been at a region where there was an outbreak. Regarding face masks, there were reports on a *shortage of masks* (n = 3), however, these messages often had a critical undertone, further stating that face masks were rather *unnecessary or unhelpful* (n = 2). It was also mentioned that in China, masks were now *mandatory* (n = 1). Articles also reported on *avoiding travelling* as a protection measurement, stating that it is recommended to not visit *affected regions* (n = 3). What was emphasized as the *most important* measurement was to keep *general hygiene* (n = 3) in terms of washing hands and coughing or sneezing in the correct way.

Another aspect that seemed to be common and important in the reporting on the corona situation during the first time period were comparisons to other diseases. Comparisons to the outbreak of *SARS in 2003* appeared to have been very common. However, the estimations on how the current coronavirus related to SARS were inconsistent. While some articles suggested that the new coronavirus was *equally contagious* (n = 3) and had the *same severity* (n = 3) as SARS, other articles suspected that it was actually *more severe* (n = 2). However, it was mostly compared to SARS in the context of being *contagious*

but less severe (n = 7), i.e. “The good news is that the current death rate of the coronavirus, around one percent, is far lower than the death rate of SARS, ten percent”. The newspaper also published articles that suspected that there was a *similar reaction by the Chinese government* regarding the two outbreaks, stating that, like during SARS, the government in China could have also tried to cover up the outbreak of the coronavirus during the beginning. Less frequently, the coronavirus was also compared to a common flu, mainly in terms of either being *less severe* (n = 5) or having the *same severity* (n = 2), having a *similar transfer* (n = 1) and *similar symptoms* (n = 3). Relatively rarely, the coronavirus was compared to the MERS outbreak in 2012, estimating that it will be *less severe* (n = 3) than MERS.

Some interesting linguistic aspects were also found in the way that the virus was characterized and the metaphors that were used in this context. When it came to the characterization of the virus, the relatively neutral term *novel* (n = 3) was used relatively rarely in comparisons to more loaded adjectives like *Chinese* (n = 1), *mysterious* (n = 5) and *worrying* (n = 2). Concerning metaphors, a *military* (n = 1) metaphor was used, describing the containment of the virus as a battle, the metaphor of a *ghost* (n = 1) was used to describe areas that were empty of people due to governmental restrictions and one article used the headline “Apocalypse? Not now!” which was meant to emphasize that the situation was not that serious. One interesting metaphor was found concerning the general risk of the virus, comparing it to the risk of a *flight* (n = 1) and reads as follows: “The current situation surrounding the coronavirus can be compared to flying in a jet. We go into the jet because we think that the risk of crashing is rather low, which it is, however, it is still not zero. The global risk surrounding the coronavirus has about the same risk.” This is a metaphor that also relates to the predictions, arguing for a relatively low chance of the virus to develop into a serious global problem while taking into account that however low the chance may be, it is not zero. *China* (n = 1) was generally considered as the epicentre of the disease during the first time period. Interestingly, the previously discussed flight metaphor actually describes the overall sentiment of the reporting, especially of the predictions on the coronavirus, by *Die Welt* during the first time frame quite well. The predictions appeared to have been rather optimistic for the most part, however, the newspaper did not leave out more negative predictions that could also become the case.

4.1.2 *Süddeutsche Zeitung*

After giving an indication the results of how *Die Welt* framed the coronavirus during the first time frame, this section discusses how *Süddeutsche Zeitung* reported in the virus. Table 5 shows the frequency of statements assigned to the general code categories to give an

overview. Frequency tables on the subcodes to the categories can be found in Appendix C and the specific content of these categories will be discussed in this section.

Table 5: Frequency of statements assigned to the overall categories (SZ, First Period)

Category	Frequency
4. Predictions	18
5. Critique towards	6
6. Protection measures	31
7. Comparisons to other diseases	10
8. Language	8
9. Epicentre	3

As can be seen, it can be said that, although the *Süddeutsche Zeitung* also made certain predictions about different aspects, the prediction function for this newspaper was not the focal point during the first time period. Predictions in general were made significantly less than in the articles of *Die Welt*. Nonetheless, some predictions were made. For example, only one article predicted where the coronavirus would spread and emphasized that the spread would most likely only *spread in countries in Asia* (n = 1). Also in the context of predictions on the relevance for German citizens, only two articles who discussed this were found, one predicting that the virus *will not arrive in Germany* at all (n = 1) and one article that predicted that there would just be *a few individual cases in the country* (n = 1). Some predictions were also made on how the coronavirus situation would impact the economy. In this context, three articles predicted that there would be *negative consequences for the market* (n = 3), i.e. stating that *“The worry about the coronavirus might continue to have negative impact on the economy and the stock market”*. The impact on the economy was also discussed related to the *tourism and airfare sectors* (n = 1), predicting a decline. *Süddeutsche Zeitung* also pointed out that there could be a *general demand decline* (n = 1) that could impact many businesses and sectors. While *Die Welt* did not make any predictions on how *the public life in Germany* could be affected, the *Süddeutsche Zeitung* did make two predictions about this, one concerning a *shutdown of the public life* (n = 1), predicting that some events might be cancelled, and one that stated that probably *nothing will close but caution will be taken* (n = 1). Predictions on the severity of the virus varied, however, like in *Die Welt*, the main emphasis also seemed to be that the virus is likely *only severe for risk groups* (n = 3), i.e. *“The virus can be predominantly deadly for people with pre-existing diseases”*. Two articles predicted that the virus was *contagious but not severe* (n = 2) and one doubted the ability to the virus to be *transmitted from human to human* (n = 1). Unlike *Die Welt*, *Süddeutsche Zeitung* did not predict anything about vaccines or the end of the situation during the first time frame. In general, it looks like *Süddeutsche Zeitung*, similar to *Die Welt*,

also had a rather optimistic outlook on the situation, again with the exception of the predictions on the economy.

With regards to the critique that the *Süddeutsche Zeitung* exercised during the first time frame, it can be said that, like in *Die Welt*, again the government in China was the main target of critique. However, the *Süddeutsche Zeitung* appeared to have different reasons to critique the Chinese government than *Die Welt*. Here, the government in China was critiqued for *not being transparent* (n = 2), i.e. “Xi Jinping constantly emphasizes the stable and harmonic state that China is in. However, nothing about this situation is stable or harmonic”. Furthermore, China was critiqued for *silencing early warnings and censoring* (n = 2) citizens. *Süddeutsche Zeitung* further criticised distributors of “Fake News” for *spreading panic* (n = 1) and citizens for *panic buying* (n = 1).

The focus of *Süddeutsche Zeitung* during the first time frame seemed to have been on reporting about protection measures; these were coded the more often than anything else and also more often than in *Die Welt*. Quarantine was mentioned often in the context of mass quarantines *for whole cities* (n = 5), specifically Wuhan, but also for *affected people* (n = 4), meaning people that were infected, had contact with infected or were coming from a strongly affected region. One article stated that quarantine is *counterproductive or unhelpful* (n = 1); “Quarantine is ethically questionable; it dehumanizes sick people who are still alive and just accepts their death to serve the greater good”. Face masks were also discussed, a *shortage of masks* (n = 5) was mostly reported on, followed by statements that assess face masks as *unnecessary or unhelpful* (n = 3) as they in most cases do not protect the wearer of the mask. Contrary to *Die Welt*, *Süddeutsche Zeitung* also recognized that masks were not always unnecessary, but could be *useful to an extent* (n = 2), i.e. to protect the people around oneself. The newspaper also highlighted the importance of not getting too close to other human beings as a protection measure and stated that the minimum distance should be *two meters* (n = 1). Any travel to *affected regions* (n = 3) was said to be avoided and social distancing was recommended only *if one was feeling sick* (n = 1). Like in *Die Welt*, hygiene was again evaluated as the *most important* (n = 6) protection measure.

Although the *Süddeutsche Zeitung* also made some comparisons to other diseases when reporting about the coronavirus, this was significantly less frequent than in *Die Welt*. Generally, the coronavirus was compared to SARS from 2003 as being *less severe* (n = 2), and a *similar reaction by the Chinese government* (n = 1) was implied. The second other disease that the coronavirus was compared to was the common flu, stating that while the virus had *similar symptoms* (n = 2) as the flu, it would be generally *less severe* (n = 3). An example of this would be “There is no reason for hysteria when looking at the 25,000 deaths caused by the flu every year”.

When looking at the linguistic aspects, the virus was not characterized with the kind of loaded terms that *Die Welt* appeared to use, however, metaphors were used. The *military* (n = 1) metaphor was used once, however, notably, the *crime* (n = 5) metaphor was used the most often. An example of such a metaphor is “*During an epidemic, it is not enough to find the terrorist while he is already wearing the bomb. One already has to find him before*”, suggesting that people who carry the virus can be seen as ‘terrorists’, that already need to be found before they show symptoms. Concerning the epicentre of the crisis, like *Die Welt*, *China* (n = 3) was agreed to be the epicentre in general.

4.1.3 Main differences during the first period

The framing of the crisis by the two newspapers slightly differed from each other during the first period. This section briefly summarizes the most important differences. Firstly, it can be said that *Die Welt* made significantly more predictions than *Süddeutsche Zeitung* during this time. Within this, it also became apparent that *Die Welt* seemed to have a stronger focus on the economy and predictions concerning it than *Süddeutsche Zeitung*. Furthermore, *Süddeutsche Zeitung* seemed to have recognized earlier than *Die Welt* the potential impacts that the virus could have on the public life in Germany. Also in general, the predictions made by *Süddeutsche Zeitung* seemed to be slightly less optimistic than the ones made by *Die Welt*. Another difference that comes to mind is that *Süddeutsche Zeitung* generally reported more on protection measures against the virus than *Die Welt*. *Die Welt* on the other hand made more than three times as many comparisons to other diseases than *Süddeutsche Zeitung*. *Die Welt* also used language differently from *Süddeutsche Zeitung*, using more loaded and dramatic terms. Overall, despite the differences in framing, both newspapers had a relatively appeasing outlook on the situation.

4.2 Second period

4.2.1 *Die Welt*

During the second time period, from January 31st until the first of March 2020, *Die Welt* seemed to report about the events differently than it did during the first time period. Table 6 shows the statements assigned to the overall categories. Frequency tables on the subcodes to the categories can be found in Appendix C. The specific discourse is written about in this section.

Table 6: Frequency of statements assigned to the overall categories (Die Welt, Second Period)

Category	Frequency
4. Predictions	41
5. Critique towards	22
6. Protection measures	21
7. Comparisons to other diseases	3
8. Language	9
9. Epicentre	10

Firstly, regarding predictions, it can already be noted that predictions in general were made less than before. Regarding predictions on the spread of the virus, there were only predictions that it would most likely become a *pandemic* (n = 6), i.e. *“Day by day the likeliness of the coronavirus to develop into a global pandemic rises”*. Predictions on how this would affect Germany differed, with one article stating that there would *only be a few individual cases* (n = 1), i.e. *“The risk to become infected with the coronavirus in Germany is about as low as the risk of getting struck by lightning.”* However, another article postulated that actually, *many people will be infected* (n = 1) and that there could be a corona epidemic in Germany. Like during the first period, the predictions on the economy were most present within the prognoses. Again, the outlook was rather negative, *negative impacts on the market* (n = 1), *struggling businesses* (n = 1), a *decline in tourism and airfare sectors* (n = 5), a *decline in conventions* (n = 3) and a *general demand decline* (n = 2) were predicted. Furthermore, *Die Welt* predicted that there would be a *larger demand than supply* (n = 3) for essential product, especially regarding medicine. While *Die Welt* did not predict any impacts on the daily life in Germany during the first period, predictions on this were made during the second time frame. The *closing of schools* (n = 1) and other measurements for a *shutdown of the public life* (n = 2), especially cancelling events. However, there were also still articles which predicted that *caution would be taken but nothing would be closed* (n = 2) or cancelled. For example, one statement reads *“There are no special precautions known regarding the coronavirus”* in an article which discussed the coronavirus in kindergardens. The German Healthcare system was still predicted to be *prepared well enough* (n = 1) for the situation, however, one article highlighted a study that predicted a *collapse* (n = 1) of the German healthcare system; *“The study predicted a collapse of the German healthcare system”*. Concerning predictions on the severity of the virus, it was predicted as being *severe only for risk groups* (n = 5) and the development of vaccines was predicted to be ready *not before 2021* (n = 1). Predictions on how or when the situation would end were not made anymore.

Critique towards different parties was discussed strikingly more often than during the previous time period. The Chinese government was still a major target for this critique, again

for *harsh measurements* (n = 1), but also for *not being transparent* (n = 2), *abusing their power* (n = 1) during this crisis and for *silencing early warnings* (n = 3) concerning the virus. During the second time period, the main focus of critique was not only on China anymore. The German government was criticised for *reacting too late* (n = 1). Distributors of 'Fake News' were more frequently criticised for *spreading panic* (n = 1), *fostering racism and xenophobia* (n = 2) and spreading *conspiracy theories* (n = 1). On the other hand, these distributors were also criticised for *downplaying the situation* (n = 1). Citizens were also more frequently criticised, often for *panic buying* (n = 3) and other *fear induced behaviour* (n = 2). Other countries like *Iran* (n = 1) also started to be criticised in terms of their management of the situation. Lastly, the World Health Organization was critiqued for *reacting too late* (n = 1) and *giving unclear instructions* (n = 1).

During the second time frame, *Die Welt* also reported more frequently on protection measures than it did during the first period. Quarantine was discussed mostly in the context of being a necessity only for *affected people* (n = 4). Regarding face masks, it can be said that again there were reports on a *shortage* (n = 4), however, the masks were not labelled as unnecessary anymore, rather, they were seen as *useful to an extent* (n = 2), mainly for the protection of others. Furthermore, there were reports on the *shortage* (n = 3) of hand sanitizers. The minimum distance that one should keep from another human being seemed to be *one to two meters* (n = 2) and social distancing seemed to be only important when *one had symptoms* (n = 1). To avoid travelling was recommended in the context of not travelling to *affected regions* (n = 2), however, one article mentioned that travel should be stopped *completely* (n = 1). It was emphasized again that general hygiene was still *most important* (n = 2) and guidelines for washing ones hands were also given; *at least twenty seconds under warm water* (n = 1).

Strikingly, there were almost no comparisons to other diseases during the second time period in *Die Welt*. This aspect appeared to have been very important for *Die Welt* during the first period. It was only compared to SARS twice, both times as *more severe* (n = 2) than SARS. It was also compared to the flu one time, reporting that the virus is *more severe* (n = 1) than the flu.

The language regarding the description of the virus appeared to characterize the virus as *scary* (n = 1), *malicious* (n = 1), and *novel* (n = 1). The most common metaphor was a *military* (n = 3) metaphor, i.e. "*There is nothing left to do than to navigate how to battle this virus*". Other metaphors that were used were the *plague* (n = 1) metaphor, the *ghost* metaphor (n = 1) and the *apocalypse* (n = 1) metaphor.

The newspaper most frequently reported on *Italy* (n = 5) as the epicentre of the virus, followed by *China* (n = 4) and, less frequently, *Iran* (n = 1).

4.2.2 Süddeutsche Zeitung

Table 7 shows the general frequency of statements that were assigned to the code categories. Like in the previous sections, such frequency tables for the subcodes can be found in Appendix C and the exact content of the reporting will be discussed in this section.

Table 7: Frequency of statements assigned to the overall categories (SZ, Second Period)

Category	Frequency
4. Predictions	39
5. Critique towards	14
6. Protection measures	22
7. Comparisons to other diseases	2
8. Language	4
9. Epicentre	8

The newspaper *Süddeutsche Zeitung* during the second period, like *Die Welt*, predicted a *pandemic* ($n = 1$). Regarding the relevance for Germany, it was predicted that the virus would *spread in Germany* ($n = 1$) and that *many citizen will be infected* ($n = 2$). Compared to the first time period, *Süddeutsche Zeitung* had many more predictions on what the virus means for the economy. Among the predictions on this were *negative effects on the market* ($n = 5$), *a bigger demand than supply* ($n = 3$), *a decline in tourism and airfare* ($n = 3$), *a decline in conventions* ($n = 4$), and *a general demand decline* ($n = 1$). Regarding the daily life in Germany, the necessity for working in *homeoffice* ($n = 1$) was predicted, as well as the *shutdown of the public life* ($n = 3$) in terms of events. The German healthcare system was mostly seen as *well prepared* ($n = 3$), and only once as *underprepared* ($n = 1$). Most predictions on the severity of the virus stated that it would only be *severe for risk groups* ($n = 3$). Interestingly, there were some predictions on the end of the situation that postulated that the situation *would be over soon* ($n = 2$), at least in Germany. One statement reads: “*There have not been new cases in Germany for days. This might be it*”.

Critique towards different actors was seen more frequently than during the first stage. The Chinese government was again receiving critique for the same reasons as before, *not being transparent* ($n = 3$) and *silencing early warnings or censorship* ($n = 4$). Distributors of “Fake News” were criticised for *spreading panic* ($n = 3$), *conspiracy theories* ($n = 1$), and *fostering racism* ($n = 1$). Citizens were only once criticised for *panic buying* ($n = 1$). The World Health organization also was only once criticised for *reacting too late* ($n = 1$).

The discussion surrounding protection measures was mainly about quarantine, again, discussing it in the context of using quarantine only for *affected people* ($n = 3$), but also *whole cities* ($n = 3$), this time not meaning the Chinese city Wuhan but cities in Italy, i.e. “*Half*

of *Italy is under quarantine*". However, quarantine was also negatively evaluated, stating that it is *counterproductive or unnecessary* (n = 2), i.e. "*Putting large areas under quarantine will most likely not stop the virus and is to be understood as actionism*". Face masks were discussed less than in the previous time period with only one article discussing a *shortage* (n = 1) of masks and reporting about how they can be *useful to an extent* (n = 1). The minimum distance that people should keep from each other was said to be *one to two meters* (n = 1). Avoiding travelling was mentioned both in the context to *affected regions* (n = 2), this time not only taking China into account in this but also identifying Italy as such a region, but also to just avoid travel *completely* (n = 1). Social distancing was still only recommended when *one has symptoms* (n = 2) of the virus. Just like during the last period, keeping general hygiene was regarded as *most important* (n = 6).

Similar to *Die Welt*, *Süddeutsche Zeitung* also made significantly less comparisons to other diseases, only comparing it to SARS twice, regarding it as *more severe* (n = 1) than SARS and suspecting a *similar economic impact* (n = 1) of the crisis.

Regarding language, it can be said that not a lot of articles characterized the coronavirus using loaded adjectives, only one article characterized the virus as *malicious* (n = 1). When looking at the metaphors, *military* (n = 2) metaphors were the most present, followed by the use of a *ghost* (n = 1) metaphor.

Discourse on the epicentre varied; *China* (n = 4) was most frequently identified as the epicentre, however, *Italy* (n = 2) and *Iran* (n = 2) were also mentioned in this context.

4.2.3 Main differences during the second period

During the second period, there were less obvious differences between the two newspapers. One interesting difference is that *Die Welt* generally seemed to be slightly more critical towards different parties and also criticised a wider array of actors than *Süddeutsche Zeitung*. Like in the previous period, *Die Welt* also showed a more arbitrary use of language by again using more rather fear inducing terms and metaphors. Other than these differences, the overall framing by the two newspapers seemed quite similar with a few slight deviations. Both newspapers seemed to have adapted a more pessimistic view on the situation than they had in the previous period.

4.3.1 Third period

4.3.1 *Die Welt*

Like during the previous sections, table 8 shows the frequency of statements assigned to each overarching category during the third time period, ranging from March second until April

first of 2020. Frequency tables of the subcategories can be found in Appendix C and the content will be discussed in this section.

Table 8: Frequency of statements assigned to the overall categories (Die Welt, Third Period)

Category	Frequency
4. Predictions	31
5. Critique towards	21
6. Protection measures	7
7. Comparisons to other diseases	2
8. Language	4
9. Epicentre	2

During the third time period, *Die Welt* generally made less predictions than in the other two phases, however, these few predictions seemed to be much less optimistic than previously. Predictions on the spread of the virus were not made anymore. There was just one prediction on the relevance of the situation for German citizens which was that *the majority will be infected* (n = 1), stating: *“In the worst case [...] researchers predict that around seventy percent of German citizens will be infected”*. Regarding the economy, the results did not look that different than compared to the second time frame; *negative impacts on the market* (n = 5), *struggling businesses* (n = 2), *a decline in tourism and airfare* (n = 2), *a decline in conventions* (n = 1) and *a general demand decline* (n = 1) were predicted. Predictions on the impact of the virus on the daily life in Germany were made more often than in the previous time frames, now predicting larger scale impacts more often, like the *shutdown of the public life* (n = 5), *closing of schools* (n = 1), *home office* (n = 2) for many and even a *complete lockdown* (n = 1) which had not been predicted before at all. It reads: *“The German law allows for different intervention techniques for the purpose of containing infectious diseases; [...] the responsible authorities can force persons to not leave the place that they are in and forbid them from going to specific places until safety is guaranteed. Not following these rules can result in larger fines and incarceration for up to two years”*. The impact on the German healthcare system was seen more negatively than previously, with only one statement predicting that the system is *well prepared* (n = 1) and two statements worrying that there could be a *collapse* (n = 2); *“Over eighty percent of people in need of intense medical care would have to be rejected by hospitals”*. The predictions on the severity of the virus were now not focused on risk groups anymore, like in the previous two time frames, but were also more negative, predicting that the virus would be *severe and cause many deaths* (n = 2). Messages on the development of vaccines differed, with one article stating that there could be a vaccine in *the summer of 2020* (n = 1) whereas a different article stated that there will be *no vaccine before 2021* (n = 1). There were also three very differing predictions on how

and when the situation would end; one article suggested that the situation would come to an end *after a few weeks to months* (n = 1), another predicted the end would be somewhere in *may* (n = 1) and one more article postulated that the situation surrounding the virus would be there for *around one year* (n = 1), i.e. *“We have to assume that this exceptional situation will last for around a year”*.

Critique towards different actors was still about as present as during the second period, however, the Chinese government, while still criticised for *silencing early warnings* (n = 1), *not being transparent* (n = 1) and *weak measurements* (n = 1), it was not the main target of critical reports anymore. Rather, the German government was more frequently criticised; i.e. for implementing measurements that are *too harsh* (n = 1), a *wrong assessment* (n = 2) of the situation but also, on the other hand, *not taking enough action* (n = 2). One statement to illustrate this is *“Angela Merkel makes the German government responsible for containing the situation; in other words, nothing will happen”*. Distributors of “Fake News” were criticised for *spreading panic* (n = 1) and *fostering racism and xenophobia* (n = 1). The most frequently mentioned target of the critique were citizens, being criticised for *panic buying* (n = 1), *criminal activities related to the crisis* (n = 1) by using the crisis to scam others and, most commonly, for *meeting in large groups* (n = 5); *“There are people who bragged on social media about ‘escaping’ isolation and therefore putting others in danger”*. The newspaper further criticised how some other countries dealt with the coronavirus situation. Targets of the critique were the *USA* (n = 1), *Russia* (n = 2) and *Austria* (n = 2).

The frequency of reporting on protection measures was also drastically lower than in the previous time periods. Quarantine was reported on from three different perspectives, one saying that quarantine is only for *affected people* (n = 1), while another statement suggests that *every citizen* (n = 1) could be quarantined and one article evaluating quarantine as *counterproductive or unhelpful* (n = 1). One article reported about a *shortage* (n = 1) in face masks, other than that they were not reported on anymore. While during the second time period a shortage of hand sanitizer was reported on, during this period it was reported that hand sanitizer was *available* (n = 1) again. To avoid travelling was reported on in the context of travelling *to affected regions* (n = 1), but it was also suggested to limit travelling *completely* (n = 1), i.e. *“People are cancelling vacations and are staying home”*. While maintaining a good hygiene was generally considered as the most important thing during the last two time periods, it was not reported on during this time frame.

Comparisons to other diseases were even less frequent than during the second time frame; the virus was only compared to SARS twice and both times, it was reported that it was *more severe* (n = 2) than SARS.

The language used has been less striking than in the past two time frames. The virus was only once characterized with the adjective *unstoppable* (n = 1). Metaphors that were

used were, like in the other periods, the *military* (n = 1) metaphor as well as the *apocalypse* metaphor, which read; “*There is an apocalypse on the German stock market*”.

The identification of the epicentre of the virus, the most affected region, did not vary this time. During this period *Italy* (n = 2) was seen as the new epicentre and China was not mentioned as the epicentre anymore.

4.3.2 Süddeutsche Zeitung

Finally, table 9 shows the frequency of statements assigned to the overall categories during the third period in *Süddeutsche Zeitung*. Frequency tables for the sub categories can be found in Appendix C and the content of these will be displayed here.

Table 9: Frequency of statements assigned to the overall categories (SZ, Third period)

Category	Frequency
4. Predictions	22
5. Critique towards	14
6. Protection measures	19
7. Comparisons to other diseases	0
8. Language	2
9. Epicentre	0

Predictions were generally made less in the third time period than during the second. Like in *Die Welt*, no further predictions on the spread of the virus were made anymore. *Süddeutsche Zeitung*, concerning the relevance for German citizens, predicted unanimously that *many citizens will be infected* (n = 4) with the virus. Predictions on the economy were less frequent than during the other two time frames, however, the choice of words that the newspaper used sounded more dramatic than before; i.e. one statement regarding *negative impacts on the market* (n = 1) reads “*The fear of a total collapse of the economy is growing. [...] Experts are alarmed about a wave of bankruptcy cases of unimaginable degree*”. The focus here seemed to be on *struggling businesses* (n = 3) that were smaller, however a *demand decline in tourism and airfare* (n = 1) was also mentioned as well as a *decline in conventions* (n = 1). Predictions on the impact that the crisis could have for the daily life in Germany were mentioned more frequently than before, with some articles suggesting that *schools will be closed* (n = 3), a *shutdown of the public life* (n = 1) and even a *complete lockdown* (n = 1) of Germany. However, one article still suggested that in most areas it would be likely that some *precautions will be taken but nothing would close* (n = 1); “*Hygiene measures will be intensified, however, there will be no closing [...]*”. The German healthcare system was now generally considered as *underprepared* (n = 1) and also predicted to *collapse* (n = 1); “*The*

collapse of the healthcare system could be a matter of only a few days". No articles suggested that the system was prepared for the situation anymore. The reporting on the severity of the virus still put emphasis on the assumption that the virus is *only severe for risk groups* (n = 4). Predictions on the development of vaccines or an end to the situation were not made anymore.

Critique towards different parties was still an important part of the reporting. Strikingly, there was no more criticism targeted at the government in China anymore. Also the German government was only criticised once for *not taking action* (n = 1), this time not directly talking about the measures that were taken regarding the coronavirus but rather a deeper rooted problem; *"During the coronacrisis there is an essential need for caregivers in hospitals and nursing homes. [...] The healthcare politics in Germany provoked a shortage of them by allowing too many hours of work, leading them to exhaustion and too little payment"*. Distributors of "Fake News" were criticised for *spreading panic* (n = 3) and *conspiracy theories* (n = 1). The main focus of criticism were clearly citizens this time; they were called out for *panic buying* (n = 4) and *meeting in larger groups* (n = 1), but also for *crimes related to the coronacrisis* (n = 3). An example of this reads *"Blackmailers on the Internet are using the fear of the citizens. More and more cases are surfacing in which an unknown scammer sent fake letters, which he claims to be are from the authorities, asking people to transfer thousands of dollars. Otherwise, they threaten to infect the receivers' entire family with the coronavirus"*. Regarding the critique towards other countries, the USA (n = 1) was criticised on how it handles the economic consequences of the situation.

Protection measures were also discussed. Quarantine was discussed in the context of only putting *affected people* (n = 2) in quarantine. A *shortage* (n = 1) of face masks was reported on, as well as a *shortage* (n = 1) of hand sanitizer. As a minimum distance, *one and a half meters* (n = 1) was identified. There were reports on travel bans in *affected regions* (n = 1) but it was also discussed *to not travel at all* (n = 1). Social distancing was the most discussed protection measure during the third time frame in *Süddeutsche Zeitung*, this time with only one report on social distancing when *one has symptoms* (n = 1), all other statements highlighted the importance of social distancing *at all times* (n = 6), i.e. *"Everybody can contribute by consciously make the decision to limit human contact to a minimum"*. Some articles also mentioned general hygiene as the *most important* (n = 4) measure.

Comparisons to other diseases were not made at all anymore. Furthermore, a specific epicentre of the outbreak was also not explicitly identified anymore. Concerning the use of language it can be said that there were few interesting aspects; the virus was once characterized as *scary* (n = 1), and the *ghost* (n = 1) metaphor was used to draw attention to the emptiness of some aspects of the public life.

4.3.3 Main differences during the third period

During the third and last period, the framing by the two newspapers seemed to differ slightly more than during the second period. *Die Welt*, like in the first period, had a stronger focus on making predictions than *Süddeutsche Zeitung*. Criticism was again more prominent in *Die Welt* than in *Süddeutsche Zeitung*. *Süddeutsche Zeitung* on the other hand reported more frequently about protection measures than *Die Welt*, although still significantly less than during the other time periods. Another notable aspect is that *Die Welt* still made some comparisons to other diseases and explicitly identified an epicentre, Italy; *Süddeutsche Zeitung* did not mention either of these aspects anymore. One final interesting difference is that while *Süddeutsche Zeitung* continued to emphasize that the virus would most likely be only harmful to risk groups, *Die Welt* did not show this emphasis anymore. All in all, both newspapers at this point had an extremely negative outlook on the situation, almost exclusively highlighting that the situation would get worse and worse from there on.

5. Discussion

After displaying the results of the research, the following section will discuss these results as well as the research in general. First, answers to the research question and sub questions will be given by elaborating on the main findings. This is followed by highlighting some theoretical and practical implications of the research. Following this, some limitations of the research will be declared and some future research recommendations will be explained. Lastly, a brief conclusion will be given.

5.1 Main findings

The objectives of this research were one, finding out how the news framing of the coronacrisis developed over the timeframe of the first of January 2020 until the first of April 2020, and two, how this framing occurred in two different news outlets; *Die Welt* and *Süddeutsche Zeitung*. This section answers the research question regarding three aspects; first, the development of the framing by *Die Welt* will be discussed, second, the framing development by *Süddeutsche Zeitung* will be explained and lastly, the main contrasts between the two outlets will be highlighted.

Generally, it can be said that the perspective and framing by *Die Welt* changed quite notably over time. During the first period, the outlook on the situation seemed rather optimistic. Making predictions on different aspects was the main focus of the framing by *Die Welt*, however, very little proportions of text suggested that the coronavirus could actually develop into the global crisis that it has become by now. Most predictions suggested that the situation would pass rather quickly and even that the virus itself is not very severe. What was interesting about how the severity of the coronavirus was assessed during the first time frame is that there seems to have been a heavy emphasis on the fact that deaths so far have only been recorded in people who belonged to a risk group. This emphasis could subconsciously suggest to readers that in case one does not belong to a risk group, one does not have to be worried about the virus. One more factor that was especially interesting during the first time frame is that making comparisons to other diseases, mostly to SARS, served as a major orientation point for *Die Welt* when it came to the assessment of the situation and was commonly used to emphasize that the corona situation is less severe than SARS. The comparisons appeared to be a way of *Die Welt* to make sense of an unknown and uncertain situation by comparing it to something that had already been experienced previously. Strikingly, starting from the second period on, only very few comparisons to other diseases were made anymore; at this point, it must have become clear that the situation was entirely unprecedented and that thus there is little use in making comparisons anymore when

assessing the situation. Generally, the outlook on the situation was more negative now, i.e. the newspaper predicted that the situation would become a global pandemic already. Another aspect that stood out during the second period in particular was that there were a lot more critical remarks than during the first period; while the Chinese government was criticised heavily during the first period, this criticism now shifted towards many different actors for different how the situation was handled by them. *Die Welt* seemed to realize the bigger picture of how the situation was dealt with and not only notice mistakes by China but by many more actors who all can influence how the situation develops. One more aspect that became apparent that military metaphors were more present than before, personifying the situation and the virus as an enemy that needs to be battled. The general tone during the second period appeared to be much more dramatic and negative than during the first period. Looking at the third period, this became even more apparent and predictions became even more pessimistic. *Die Welt* at this point recognized the larger scale impacts that the situation had and that the situation would last for a rather long time. It also shifted away from the idea that the virus would only be severe for risk groups and instead suspected that it would be the cause of many deaths regardless of the medical history of people. As it became clear that citizens have a large role in containing the virus, the main focus of critical remarks was now set to citizens and how their behaviour made the situation worse. That being the case, one would suspect that the newspaper would cover protection measures that individuals can use more frequently, however, paradoxically, this was not the case; news coverage on protection measures decreased drastically compared to the other time frames. Thus, the development of the reporting of the coronacrisis in *Die Welt* changed over time, with a clear shift in tone; from viewing it as a crisis that is far away and can be overcome rather quickly and easily and is not as threatening, to mostly reporting about how terrible the situation is and how much worse it could potentially get.

The general overall development of the framing by *Süddeutsche Zeitung* did not seem to differ that strongly from the framing by *Die Welt*. The outlook during the beginning of the situation was also rather optimistic, although not as optimistic as in *Die Welt*. During the first time frame, discussing and reporting on protection measures seemed to have been the main focus of *Süddeutsche Zeitung*. One interesting aspect that was found in the newspaper was the language; a crime metaphor for the virus was used many times, characterizing the virus as a criminal that wants to harm society. During the second time frame, more predictions were made by *Süddeutsche Zeitung*, while still reporting about protection measures extensively. The predictions however were significantly more negative than before and more and more dangerous aspects of the virus were highlighted and larger scale impacts were predicted. However, strikingly, at the same time, there were still articles predicting that the whole situation would end soon. Thus, it seems like there was some confusion and

uncertainty about the development on the situation. While the first time period did not involve a lot of critique towards different actors, this was mentioned more frequently during the second time period, with a focus on the Chinese government but also already some other actors like distributors of "Fake News" and citizens, as well as the World Health Organization. During the last period, the outlook on the situation seemed to be even more negative, with almost only negative predictions. The criticism had now completely shifted away from China, its government was not criticized anymore; in the main focus of the criticism were citizens. On account of these elements, it seems that, like *Die Welt*, *Süddeutsche Zeitung* also had a change in framing over time; in the beginning, the coronacrisis was framed as something that was far away and did not pose a large threat but over time, this developed into framing it as something that is indeed dangerous and becoming more and more dangerous for an increasing amount of aspects of life.

Looking at these developments, in both *Die Welt* and *Süddeutsche Zeitung*, a concrete answer to the first part of research question, which concerned how the framing of the coronavirus developed in the newspapers over time, can be given. The newspapers both seemed to go from framing the coronavirus as something that happens somewhere on the other side of the world and will likely end soon without many consequences, even as something that some people are wrongfully concerned about, to a dangerous threat that will have long term impacts worldwide. This shift from an optimistic view to a really pessimistic standpoint did not seem to have been triggered by any specific event; the change in sentiment was not rapid, rather, the development seemed to have been very gradual and a more negative viewpoint was slowly adapted over time.

After answering the first part of the research questions, this section answers the second part of the research question, which concerned how the newspapers differed in their framing. Although the overall framing development of the two news outlets did not seem to differ immensely, there are three elements in particular that are interesting to point out when contrasting the two newspapers. Firstly, it should be noted that the newspaper *Süddeutsche Zeitung* predicted impacts and relevance of the situation, especially in the context of the relevance for German citizens, earlier than *Die Welt*. In general, it can be said that *Süddeutsche Zeitung* was more explicit about the diverse risks that the coronavirus brought with it already in the earlier phases than *Die Welt*. The overall tone of *Süddeutsche Zeitung* therefore appeared to be slightly more pessimistic than in *Die Welt*. The second aspect that is interesting is that the prediction function of the news media and the function to criticise different actors that are involved in a situation seemed to be strikingly more present in *Die Welt* than in *Süddeutsche Zeitung*. On the other hand, *Süddeutsche Zeitung* appeared to focus more on informing about protection measures than *Die Welt*. Lastly, one more element that stood out was that *Die Welt* seemed to use language differently from *Süddeutsche*

Zeitung; Die Welt used more loaded and rather dramatic terms for the characterization of the virus whereas *Süddeutsche Zeitung* overall used less suggestive and more neutral terms.

5.2 Theoretical Implications

This research adds to the theory on news media framing, especially in the context of framing public health crises. There are two main theoretical implications that this research has.

One interesting theoretical implication is that the news framing of the coronacrisis appears to have several parallels to the framing of the SARS outbreak of 2003. For example, Wallis and Nerlich (2005) found that comparisons to other diseases were an important element in framing SARS. This research also found many comparisons to other outbreaks, especially SARS, and especially during the beginning stage. Furthermore, the researchers Wallis and Nerlich (2005) also found that many centred newspapers criticised some actors for fostering racism and xenophobia; this also seemed to be the case during the framing of the coronacrisis. Smith (2009) found that predictions on the severity and spread of the virus were very mixed and relatively inconsistent due to the uncertainty of the situation. This also appeared to be the case in the reporting on the coronacrisis, especially during the beginning. Regarding language, a study by Wallis and Nerlich (2005) found that SARS was often framed as a criminal, which is a metaphor that could also be found for the coronavirus, especially in *Süddeutsche Zeitung*. Thus, the results of this research also imply that there do seem to be some sorts of patterns when it comes to the framing of a public health crisis.

However, in spite of these parallels to the framing of SARS that could be identified, the overall development of the framing of the coronacrisis seemed to be the exact opposite compared to how the news framing of SARS developed. Smith (2009) found that during the SARS crisis in 2003, the news media first framed the SARS as a rather catastrophic situation and a very large threat. This was then found to slowly progress into framing SARS as a situation that is rather far away and that will end soon. Mayor et al (2012) found a very similar progression in the framing of Ebola. This study found the exact opposite; the framing of the coronavirus developed from being a situation that is far away and not very severe to reporting on how much worse the situation becomes and could continue to become over time.

5.3 Practical Implications

Next to the previously mentioned theoretical implications, there are also two practical implications that the present research has. First, it can be said that citizens should make use of multiple news sources and news outlets in order to get the full picture of a situation and be

able to form their own opinion about a situation. While this study did not find major differences between the two analysed news outlets, there still seemed to be different focal points. Therefore, in order to receive as much information as possible, citizens should take several different news outlets into consideration.

The second practical implication is directed at journalists and other practitioners in the news media field such as editors. These actors play a large role in how a situation is perceived. As previously discussed, during the beginning of the crisis, the coronavirus was mostly framed as something that citizens should not worry too much about. Looking at how the situation has developed until this point in time, and taking into account the theory on how media frames can influence the behaviour of the public, there could possibly be a connection between citizen behaviour and the way that the newspapers assessed the situation. The proposed harmlessness of the virus could have influenced the audiences to take the situation too lightly, which, as is known at this point in time, lead to a larger spread of the virus. However this is in no way to say that the media should have predicted the severity of this situation right away, no one could have done that, and also not that highlighting more risks during the beginning of the reporting would have prevented the outbreak of the pandemic. Nonetheless, in the future, maybe in the context of future health crises, practitioners in the media field could possibly take into account how the coronacrisis played out and try to be aware of their own role and the responsibility that they have, especially in a situation like this.

5.4 Limitations

Every research has its limitations and so does this one. The present study has four different main limitations. Arguably, the most obvious and main limitation of the present study is the rather small sample size. The coronacrisis has been a topic that was, and at the current time still is, extremely frequently reported on by both of the analysed news outlets, *Süddeutsche Zeitung* and *Die Welt*. When using the database Nexis Uni, thousands of articles regarding the topic were found. A sample size of 180 articles does not seem like a lot in comparison that number. This could also have an impact on to what extent one can draw inferences about the overall framing of the two news outlets by this study. A bigger sample size would certainly improve the level of inference that could be drawn from an analysis. However, analysing more than this number of articles was simply not possible within the given time frame and scale of the research.

Secondly, regarding the coding process, it can be said that there is at least some subjectivity present when it comes to coding manually, especially as this research utilized an inductive approach to coding. This could mean that the study could be harder to replicate. In order to prevent this from impacting the reliability of the coding scheme too much, the

intercoder reliability test was conducted with the help of a second researcher and lead to a good result which at least could show that the coding scheme was comprehensible, also for other researchers. This however does not mean that this completely erased any risk to subjective biases the main researcher may have had.

One more limitation of the present study is the barrier in language. The newspaper articles were written and published in German, whereas the codebook was constructed in English. While this was not a problem for the majority of the codes, it might have been slightly problematic when it came to the codes that were concerning linguistic aspects and metaphors. Especially metaphors but also sayings are oftentimes, although not always, unique to a language. Therefore, the possibility is there that some aspects regarding this might have been lost in translation, which means that meaning could not properly be assigned to them.

Lastly, it should be noted that only two news outlets were analysed in terms of their framing of the coronacrisis. There are a plethora of other news outlets across the political spectrum in Germany. This means that, while the present research gave at least some indication of how the two news outlets framed the crisis, it cannot give an overall picture of how the crisis was framed in Germany, as it just incorporated two news outlets out of many.

5.5 Future research directions

As previously elaborated on, this research had its limitations. One benefit of recognizing the limitations of one's own research is the possibility of being able to give some recommendations on where future researchers who are interested in researching the framing of the coronacrisis could take their research.

Firstly, as a general recommendation, it can be said that in the future, a much larger sample size should be analysed in order to ensure that real inferences can be drawn from the study. But there are also other factors regarding the research design that future researchers may consider implementing in their own research. For example, it might be an option to use a mix between an inductive and a deductive approach to developing the coding scheme; this could ensure that as many relevant factors as possible are taken into account during the analysis. Furthermore, concerning the coding itself, it might be useful to either work on such a research with a team of different researchers with different political orientations; this would reduce the risk of any subjective or political biases during the coding process. Otherwise, if this is not possible, it could also be helpful to ask a second coder of a different political orientation than the main researcher to code the data sample for the intercoder reliability test.

Lastly, there are a plethora of different angles that the framing of the coronacrisis can be explored from. One interesting viewpoint would be to take more news media outlets in Germany into account and thus comparing more different viewpoints to one another than just the two outlets. This could help give an indication of the overall media discourse regarding the coronacrisis in Germany. It would also be interesting to look specifically into news outlets that could be considered to be on radical or extreme sides of the political spectrum to see how such a crisis is framed by extremists. One more interesting angle would be to compare how news outlets in different countries framed the coronavirus in order to learn where the differences between these countries lie. Therefore, it can be said that there are many different directions that research regarding the framing of the coronavirus can go in the future.

5.6 Conclusion

The present research adds to the literature on the news framing of public health crises. One addition to the academic discourse concerning this topic is that this study found some reoccurring patterns that have been found during other public health crises also in the framing of the coronacrisis. Furthermore, the present study also found that the overall development of the framing of the coronacrisis seemed to be the opposite of how other public health crises like SARS or Ebola were framed in the past. The general framing of the coronacrisis seemed to develop from framing it as a situation that is far away and that does not pose a large threat to framing it as a major crisis that indeed poses a threat that is continually growing. *Die Welt* and *Süddeutsche Zeitung* both showed this overall development, however, they had different focal points in their reporting; while *Die Welt* had a strong focus on making predictions and being critical towards different actors, the focal point of the *Süddeutsche Zeitung* seemed to have been more on reporting about protection measures. Therefore, in order to receive the full picture of a situation, it may make sense for citizens to use several different news outlets to inform themselves about a situation; this way, more perspectives are highlighted and the audiences can benefit the most from the information that they are receiving. As the news media can affect the behaviour of their audiences, practitioners in the news media field should always be aware of the responsibility and impact that they can have.

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Appendices

Appendix A: Mandatory Study Log

Research questions

RQ: "What literature can be found on scientific databases concerning news framing?"

Criteria of literature selection

The main criteria for the selection of the literature that was to be used was that the articles could be classified as being published by a scientific outlet such as journals and that it was peer-reviewed. Furthermore, the articles should be written in the English language.

Selection of databases

The literature was drawn mostly from Scopus. The reason for this is that this scientific search engine offers the possibility to adjust the search in different ways through an advanced search function. Scopus is also not a publisher but a search engine, meaning that it was possible to view articles published by a variety of different outlets.

Table 1: Relevant terms

Concepts	Related terms	Smaller terms	Broader terms
News framing	News frames, news media	Generic frames, Issue-specific frames	Framing

Table 2: Search actions by the example of RQ

	Date	Database	Search action/search technique	Total hits
1	06.05.2020	Scopus	"news framing"	2468
2	06.05.2020	Scopus	Limit to: Publication years 2005 – 2020	2297
3	06.05.2020	Scopus	Limit to: Social Sciences	1886
4	06.05.2020	Scopus	Limit to: Document type: Article	1646
5	06.05.2020	Scopus	Limit to: Publication Stage: Final	1580
6	06.05.2020	Scopus	Limit to: Keyword: News Framing	79
7	06.05.2020	Scopus	Limit to: Language: English	74

Examples of found references in APA

De Vreese, C. H. (2005). News framing: Theory and typology. *Information Design Journal & Document Design*, 13(1), 51–62. doi:10.1075/idjdd.13.1.06vre

Matthes, J., Schemer, C. (2012). Diachronic Framing Effects in in Competitive Opinion Environments. *Political Communication*, 29(3), 319–393. doi:10.1080/10584609.2012.694985

Reflection

The general goal of the literature search was to find relevant and reliable literature on the topic of news framing and could be achieved using the search engine Scopus. The fact that Scopus has the function to select criteria for the sources that one is looking for, it was not hard to exclude literature that was regarded as not relevant and therefore, the relevant literature was easily accessible. Relevance of the articles were assessed by factors such as the year of publication, to make sure the source was not too outdated, or the language, English. Furthermore, the engine had the ability to show how many times the sources were cited by peers, which also gave a good indication of their relevance. All in all, it can be said that the search for relevant and reliable sources was successful.

Appendix B: Complete codebook

Table 3: Complete codebook

Code	Subcode	Subcode
1. News Outlet	1.1 Die Welt 1.2 Süddeutsche Zeitung	
2. Publication Date	2.1 Period one 2.2 Period two 2.3 Period three	
3. News Section	3.1 Sport 3.2 Compact 3.3 Economy 3.4 Titel 3.5 Politics 3.6 Topical (Tagesthemen) 3.7 Culture 3.8 Panorama 3.9 Science 3.10 Media 3.11 Travel	
4. Predictions on	4.1 Spread of the Virus	4.1.1 stays in China 4.1.2 spreads in Asia 4.1.3 spreads in the USA 4.1.4 spreads in Europe 4.1.5 Pandemic
	4.2 Relevance for German Citizens	4.2.1 Will not arrive in Germany 4.2.2 Likely to spread in Germany 4.2.3 Many citizen will be infected 4.2.4 Majority of citizens will be infected 4.2.5 Only a few individual cases
	4.3 Impact on the Economy	4.3.1 Stock market Rise 4.3.2 Negative effects on the markets 4.3.3 Struggling Businesses 4.3.4 Demand > Supply 4.3.5 Decline in Tourism & Airfare sector 4.3.6 Decline in conventions 4.3.7 Demand Decline 4.3.8 Carriage
	4.4 Impact on the daily life in Germany	4.4.1 Home office 4.4.2 Closing schools 4.4.3 Shutdown of the public life

		4.4.4 Total lockdown
		4.4.5 Being cautious, but not closing or restricting anything
	4.5 Impact on the Healthcare System	4.5.1 Prepared well enough 4.5.2 Underprepared 4.5.3 Collapse
	4.6 Severity of the Virus	4.6.1 Contagious, but not severe 4.6.2 Severe for risk groups 4.6.3 Could be severe for anyone 4.6.4 No transmission among humans 4.6.5 Very severe / many deaths
	4.7 Development of vaccines	4.7.1 Summer 2020 4.7.2 Not before 2021 4.7.3 completely unclear
	4.8 End of the situation	4.8.1 Quick disappearance 4.8.2 A few weeks to a few months 4.8.3 around May 4.8.4 A year
5. Critique towards	5.1 Chinese government	5.1.1 Harsh measurements 5.1.2 Not being transparent 5.1.3 Silencing early warnings / Censorship 5.1.4 Measurements not harsh enough 5.1.5 Power abuse
	5.2 German government	5.2.1 Not taking action 5.2.2 Reacting too late 5.2.3 Harsh measurements 5.2.4 Wrong assessment of the situation
	5.3 Distributors of "Fake News"	5.3.1 Spreading panic 5.3.2 Downplaying the situation 5.3.3 Conspiracy theories 5.3.4 Fostering racism & Xenophobia
	5.4 Citizens	5.4.1 Panic buying / Hoarding 5.4.2 Meeting in large groups 5.4.3 Fear induced behaviour 5.4.4 Criminal activities

		related to the crisis
	5.5 Other countries	5.5.1 Iran 5.5.2 USA 5.5.3 Russia 5.5.4 Austria
	5.6 WHO	5.6.1 Late reaction 5.6.2 Unclear instructions
6. Protection Measures	6.1 Quarantine	6.1.1 For affected people only 6.1.2 For every citizen 6.1.3 counterproductive / unnecessary 6.1.4 For entire cities
	6.2 Face masks	6.2.1 Unnecessary / 6.2.2 Shortage 6.2.3 Useful to an extent 6.2.4 Mandatory
	6.3 Hand sanitizer	6.3.1 Shortage 6.3.2 Available
	6.4 Minimum Distance	6.4.1 Two meters 6.4.2 One and a half meters 6.4.3 One to two meters
	6.5 Avoid travelling	6.5.1 To affected regions 6.5.2 Completely
	6.6 Social Distancing	6.6.1 In case of sickness 6.6.2 For everyone
	6.7 Hygiene	6.7.1 Most important 6.7.2 Washing hands at least twenty seconds
7. Comparison to other diseases	7.1 SARS 2003	7.1.1 Equally contagious 7.1.2 Same severity 7.1.3 Contagious but less severe 7.1.4 More severe 7.1.5 Similar reaction by the Chinese government 7.1.6 Similar symptoms 7.1.7 Similar economic impact
	7.2 Common flu	7.2.1 Less severe 7.2.2 More severe 7.2.3 Same severity 7.2.4 Similar symptoms 7.2.5 Similar transfer

	7.3 MERS 2012	7.3.1 Less severe
8. Language	8.1 Characterization of the virus	8.1.1 Mysterious 8.1.2 Novel 8.1.3 Scary 8.1.4 Unstoppable 8.1.5 Chinese 8.1.6 Worrying 8.1.7 Harmless 8.1.8 Malicious
	8.2 Metaphors	8.2.1 Military / War 8.2.2 Plague 8.2.3 Crime 8.2.4 Ghost 8.2.5 Apocalypse 8.2.6 Flight
9. Epicentre	9.1 China 9.2 Italy 9.3 Iran	

Appendix C: Frequency tables

First Period, Die Welt

Table 1: 4. Predictions on (First Period, Die Welt)

Subcode	Frequency
4.1 Spread of the virus	9
4.2 Relevance for German citizens	14
4.3 Impact on economy	23
4.4 Impact on the daily life in Germany	0
4.5 Impact on the German healthcare system	8
4.6 Severity of the virus	11
4.7 Development of vaccines	1
4.8 "End" of the situation	2

Table 2: 5. Critique towards (First Period, Die Welt)

Subcode	Frequency
5.1 Chinese government	5
5.2 German government	1
5.3 Distributors of "Fake News"	3
5.4 Citizens	1
5.5 Other countries	0
5.6 WHO	0

Table 3: 6. Protection measures (First Period, Die Welt)

Subcode	Frequency
6.1 Quarantine	5
6.2 Face masks	6
6.3 Hand sanitizer	0
6.4 Minimum distance	0
6.5 Avoid travelling	3
6.6 Social Distancing	0
6.7 Hygiene	4

Table 4: 7. Comparison to other diseases (First Period, Welt)

Subcode	Frequency
7.1 SARS 2003	22
7.2 Common flu	11
7.3 MERS 2012	3

Table 5: 8. Language (First Period, Die Welt)

Subcode	Frequency
8.1 Characterization of the virus	11
8.2 Metaphors	4

Table 6 : 9. Epicentre (First Period, Die Welt)

Subcode	Frequency
9.1 China	6
9.2 Italy	0
9.3 Iran	0

First Period, Süddeutsche Zeitung

Table 7: 4. Predictions on (First Period, Süddeutsche Zeitung)

Subcode	Frequency
4.1 Spread of the virus	1
4.2 Relevance for German citizens	2
4.3 Impact on economy	5
4.4 Impact on the daily life in Germany	2
4.5 Impact on the German healthcare system	2
4.6 Severity of the virus	6
4.7 Development of vaccines	0
4.8 "End" of the situation	0

Table 8: 5. Critique towards (First Period, Süddeutsche Zeitung)

Subcode	Frequency
5.1 Chinese government	4
5.2 German government	0
5.3 Distributors of "Fake News"	1
5.4 Citizens	1
5.5 Other countries	0
5.6 WHO	0

Table 9: 6. Protection measures (First Period, Süddeutsche Zeitung)

Subcode	Frequency
6.1 Quarantine	10
6.2 Face masks	10
6.3 Hand sanitizer	1
6.4 Minimum distance	1
6.5 Avoid travelling	3
6.6 Social Distancing	1
6.7 Hygiene	6

Table 10: 7. Comparison to other diseases (First Period, Süddeutsche Zeitung)

Subcode	Frequency
7.1 SARS 2003	6
7.2 Common flu	5
7.3 MERS 2012	0

Table 11: 8. Language (First Period, Süddeutsche Zeitung)

Subcode	Frequency
8.1 Characterization of the virus	2
8.2 Metaphors	6

Table 12: 9. Epicentre (First Period, Süddeutsche Zeitung)

Subcode	Frequency
9.1 China	3
9.2 Italy	0
9.3 Iran	0

Second Period, Die Welt

Table 13: 4. Predictions on (Second Period, Die Welt)

Subcode	Frequency
4.1 Spread of the virus	5
4.2 Relevance for German citizens	2
4.3 Impact on economy	21
4.4 Impact on the daily life in Germany	5
4.5 Impact on the German healthcare system	2
4.6 Severity of the virus	5
4.7 Development of vaccines	1
4.8 "End" of the situation	0

Table 14: 5. Critique towards (Second Period, Die Welt)

Subcode	Frequency
5.1 Chinese government	7
5.2 German government	1
5.3 Distributors of "Fake News"	6
5.4 Citizens	5
5.5 Other countries	1
5.6 WHO	2

Table 15: 6. Protection measures (Second Period, Die Welt)

Subcode	Frequency
6.1 Quarantine	5
6.2 Face masks	6
6.3 Hand sanitizer	4
6.4 Minimum distance	2
6.5 Avoid travelling	3
6.6 Social Distancing	1
6.7 Hygiene	3

Table 16: 7. Comparison to other diseases (Second Period, Die Welt)

Subcode	Frequency
7.1 SARS 2003	2
7.2 Common flu	1
7.3 MERS 2012	0

Table 17: 8. Language (Second Period, Die Welt)

Subcode	Frequency
8.1 Characterization of the virus	3
8.2 Metaphors	6

Table 18: 9. Epicentre (Second Period, Die Welt)

Subcode	Frequency
9.1 China	4
9.2 Italy	5
9.3 Iran	1

Second Period, Süddeutsche Zeitung

Table 19: 4. Predictions on (Second Period, Süddeutsche Zeitung)

Subcode	Frequency
4.1 Spread of the virus	1
4.2 Relevance for German citizens	3
4.3 Impact on economy	20
4.4 Impact on the daily life in Germany	4
4.5 Impact on the German healthcare system	4
4.6 Severity of the virus	5
4.7 Development of vaccines	0
4.8 "End" of the situation	2

Table 20: 5. Critique towards (Second Period, Süddeutsche Zeitung)

Subcode	Frequency
5.1 Chinese government	7
5.2 German government	0
5.3 Distributors of "Fake News"	4
5.4 Citizens	1
5.5 Other countries	0
5.6 WHO	1

Table 21: 6. Protection measures (Second Period, Süddeutsche Zeitung)

Subcode	Frequency
6.1 Quarantine	8
6.2 Face masks	2
6.3 Hand sanitizer	0
6.4 Minimum distance	1
6.5 Avoid travelling	3
6.6 Social Distancing	2
6.7 Hygiene	6

Table 22: 7. Comparison to other diseases (Second Period, Süddeutsche Zeitung)

Subcode	Frequency
7.1 SARS 2003	2
7.2 Common flu	0
7.3 MERS 2012	0

Table 23: 8. Language (Second Period, Süddeutsche Zeitung)

Subcode	Frequency
8.1 Characterization of the virus	1
8.2 Metaphors	3

Table 24: 9. Epicentre (Second Period, Süddeutsche Zeitung)

Subcode	Frequency
9.1 China	4
9.2 Italy	2
9.3 Iran	2

Third Period, Die Welt

Table 25: 4. Predictions on (Third period, Die Welt)

Subcode	Frequency
4.1 Spread of the virus	0
4.2 Relevance for German citizens	1
4.3 Impact on economy	11
4.4 Impact on the daily life in Germany	8
4.5 Impact on the German healthcare system	3
4.6 Severity of the virus	2
4.7 Development of vaccines	2
4.8 "End" of the situation	3

Table 26: 5. Critique towards (Third period, Die Welt)

Subcode	Frequency
5.1 Chinese government	3
5.2 German government	5
5.3 Distributors of "Fake News"	2
5.4 Citizens	7
5.5 Other countries	5
5.6 WHO	0

Table 27: 6. Protection measures (Third period, Die Welt)

Subcode	Frequency
6.1 Quarantine	3
6.2 Face masks	1
6.3 Hand sanitizer	1
6.4 Minimum distance	0
6.5 Avoid travelling	2
6.6 Social Distancing	1
6.7 Hygiene	0

Table 28: 7. Comparison to other diseases (Third period, Die Welt)

Subcode	Frequency
7.1 SARS 2003	2
7.2 Common flu	0
7.3 MERS 2012	0

Table 29: 8. Language (Third period, Die Welt)

Subcode	Frequency
8.1 Characterization of the virus	1
8.2 Metaphors	3

Table 30: 9. Epicentre (Third period, Die Welt)

Subcode	Frequency
9.1 China	0
9.2 Italy	2
9.3 Iran	0

Third Period, Süddeutsche Zeitung

Table 31: 4. Predictions on (Third period, Süddeutsche Zeitung)

Subcode	Frequency
4.1 Spread of the virus	0
4.2 Relevance for German citizens	4
4.3 Impact on economy	6
4.4 Impact on the daily life in Germany	6
4.5 Impact on the German healthcare system	2
4.6 Severity of the virus	4
4.7 Development of vaccines	0
4.8 "End" of the situation	0

Table 32: 5. Critique towards (Third period, Süddeutsche Zeitung)

Subcode	Frequency
5.1 Chinese government	0
5.2 German government	1
5.3 Distributors of "Fake News"	4
5.4 Citizens	8
5.5 Other countries	1
5.6 WHO	0

Table 33: 6. Protection measures (Third period, Süddeutsche Zeitung)

Subcode	Frequency
6.1 Quarantine	2
6.2 Face masks	2
6.3 Hand sanitizer	1
6.4 Minimum distance	1
6.5 Avoid travelling	2
6.6 Social Distancing	7
6.7 Hygiene	4

Table 34: 7. Comparison to other diseases (Third period, Süddeutsche Zeitung)

Subcode	Frequency
7.1 SARS 2003	0
7.2 Common flu	0
7.3 MERS 2012	0

Table 35: Language (Third Period, Süddeutsche Zeitung)

Subcode	Frequency
8.1 Characterization of the virus	1
8.2 Metaphors	1

Table 36: 9. Epicentre (Third period, Süddeutsche Zeitung)

Subcode	Frequency
9.1 China	0
9.2 Italy	0
9.3 Iran	0